Gulstonian Lectures
ON
SPASM IN CHRONIC NERVE DISEASE.

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LECTURE I.

(*Concluded from page 535.*)

IN THE LANCET of September 27th, 1884, my colleague, Dr. Reid, published his "Observations on the Relation of the Principal Fissures and Convolutions of the Cerebrum to the Outer Surface of the Scalp." Before the patient left the Home Dr. Edmunds got Dr. Reid's assistance in determining the position of the lesion by surface markings. The boy's head was shaved, and the fissures marked upon the smooth surface, and the opening in the skull was found to be half an inch in front of the middle of the fissure of Rolando. But as it was known that the disease extended backwards along the dura mater for a short distance behind the opening, the conclusion drawn was that the middle of the ascending frontal and ascending parietal convolutions was the part affected. The account I am about to give of the post-mortem examination shows how accurate this localisation was. The patient returned to the Home on Sept. 11th, 1885, looking very ill and emaciated, and with a sinus on the right side and back of the neck, connected with an evident angular curvature of the spine. His right

FIG. 8.

Diagram showing the position of the cortical lesion. The lighter shading represents the area of adhesion between the dura mater and the arachnoid; the darker area the superficial destruction of the cortex.

arm was flexed at the elbow, and could not be completely extended. He died of exhaustion on Nov. 12th, 1885, the end being accelerated by diarrhœa, which was scarcely controllable. At the post-mortem examination relics of past peritonitis were found, and old and recent tubercular affection of the lungs. There was a chronic abscess in relation with caries of the lower cervical vertebræ, the disease which had produced the angular curvature. There was chronic thickening of the membranes of the cord in this region, but no evident disease of the cord itself. Dr. Edmunds was good enough to hand over to me the brain and spinal cord for careful examination. The following is an account of the condition of things which I found, after hardening the specimens in spirit. The dura mater, which was thickened and adherent over a portion of the left parietal convolutions, was gently peeled off, and that part of the cortex which was so far invaded by disease that it could not be separated from the dura mater, but was torn during its removal, is marked in Fig. 8. The lighter shading represents very slight superficial abrasion, and the darker central part shows where the disease had sunk deeper into the grey matter. The area marked in the figure measured an inch and a half vertically, and the same horizontally. The position which it occupied was the upper half of the middle third of the ascending frontal and parietal convolutions, together with a small portion of the posterior extremity of the middle and of the superior frontal convolutions. On making a horizontal section through the basal ganglia and the internal capsule, a slight discolouration could be seen in the latter just behind its knee. On making a vertical section through the ascending frontal convolution, and traversing the centre of the diseased area, the destruction of cortex was seen to be quite superficial, and no degeneration was made out in the subcortical white matter. The cord was examined high up in the cervical region, above the seat of the chronic meningitis which resulted from the disease of the cervical vertebræ. The sections show that the right half is much smaller than the left, the diminution in size being apparent, not only in the lateral column, but also in the column of Türck. Under the microscope, the connective tissue in the right lateral column is seen to be denser than that in the left, and the nerve fibres appear to be here and there less numerous.

Hospitals where old people congregate afford the best opportunities for post-mortem examination of persons whose brain is the seat of softening originating long before death. Charcot has given his experience at the Salpêtrière, and he says:[1] "In these cases the lesion presented itself under the form of yellow softening (*plaques jaunes*), more or less extensive in area, involving, to a variable depth, the subjacent white matter, and occupying the most diverse regions of the surface of the hemisphere. It is expressly mentioned in all the observations that the softening had not affected the central masses: optic thalami, caudate and lenticular nuclei, and internal capsule. My observations may be divided into two groups. The first includes the cases in which permanent hemiplegia had not existed during life, and in which secondary degeneration was found at the necropsy to be absent. In all, the convolutions supplied by the Sylvian artery, and particularly the ascending frontal and parietal, remained intact. The yellow softening was situated in one of the following regions—namely, some part of the sphenoidal lobes, the lobulus quadratus, the cuneus, one or both occipital lobes in their entirety, some part of the anterior two-thirds of the frontal lobes. In all cases of the second group there had been, on the other hand, permanent hemiplegia and well-marked secondary sclerosis. The feature common to these cases is that the lesions invariably involved, to a greater or less extent, one or other of the ascending frontal and parietal convolutions, principally in their upper half, and often both at the same time. In addition, the regions nearest to the frontal and parietal convolutions were very frequently involved."

In most instances, destruction of a portion of the pyramidal tract on one side gives rise to paralysis and spasm on the opposite side of the body only; but occasionally spasm of the muscles on the same side as the lesion follows later in the history of the case. This is probably due to sclerosis appearing in the opposite lateral column, as Pitres has shown that it often does; and Mr. Sherrington has shown that it occurs in dogs which have had one pyramidal tract experimentally injured. But although this is probably the cause of most cases of bilateral spasm from unilateral lesion, the possibility of the presence of a bilateral lesion must be borne in mind. In the *Revue de Médecine* of May, 1883, Emile Demange records a case of the kind where a bilateral lesion was found in the brain post mortem.

Leaving affections of the cortical and subcortical portions of the pyramidal tract, let us pass to a consideration of the symptoms which accompany diseases of it as it traverses the basal ganglia, crura cerebri, pons Varolii, and medulla oblongata. It is needless, before an audience like the present, to recount cases of hemiplegia followed by rigidity, which result from destruction of the internal capsule by hæmorrhage or softening. Such examples of disease are of common occurrence, and well known to all. I shall rather give an account of a series of cases which are less frequently met with, and which made a considerable impression upon me from two points of view:—1. Because they seem to

[1] Lectures on the Localisation of Cerebral and Spinal Diseases, translated by Walter Baugh Hadden, M.D. 1883. New Sydenham Soc., p. 161.

throw considerable light on the rigidity and tetanic seizures which are observed in tumours of the cerebellum. 2. Because I failed to recognise the position of the disease in the brain during life, though a reconsideration of the symptoms leads me to think that others might have succeeded.

Case in which a Tubercular Mass occupied both Optic Thalami, producing Paralysis, Tumours, and Rigidity of the Limbs.—F. P——, aged four, was admitted into St. Thomas's Hospital under Mr. Sydney Jones, in August, 1878, and on the 22nd of the following October excision of the left astragalus was performed. The child did very well and was bright and playful until January 28th, 1879, when tremors of the left arm and leg were noticed. They were rhythmical to-and-fro movements, of short excursion, occurring only when the limbs were used voluntarily. There was very little loss of power, no affection of speech, deglutition, or respiration; and the tongue, face, and eyes all moved normally. On March 5th the child was still bright and lively, though pale; and it was noticed that the tremors were more marked on some days than on others. The left side of the face and the right hand had also begun to show similar tremors when used. The patient was sent out of the hospital, but was readmitted under Mr. Sydney Jones on July 8th, 1879, because the ankle and general condition were said to be worse. He had gone gradually downhill, had become very drowsy, passed his evacuations in bed, and was more tremulous. On readmission his face was pale and a large dilated vein coursed transversely across the right upper eyelid. He was always asleep unless roused, and would even fall asleep while eating ravenously. His appetite was good, but he never asked for food. He complained of no pain, but appeared to have general hyperæsthesia of the skin. He was very irritable and peevish, crying out loudly when disturbed or contradicted. There were now rhythmical tremors of the right upper extremity, which were excited by voluntary efforts, and resembled those which used to affect the left side; the latter had ceased and given place to rigid contraction. The elbow was flexed, and the hand clenched so tightly that the finger-nails had produced ulcers in the palm. The hand was pronated, and the rigidity was constant. The mouth appeared natural when at rest, but when the child laughed or cried it was drawn up to the right. There was no squint; the pupils were large and acted to light. The tongue was protruded straight, but was tremulous, and speech was slow. There was no deafness, but the ophthalmoscope revealed double optic neuritis. There was no vomiting or dysphagia; the bowels were very confined, and the evacuations passed in bed. The pulse was 114, respiration 24, and the temperature varied between 99·4° and 101° F. The viscera appeared to be healthy. Until Oct. 8th the symptoms already described became worse. The right hand, arm, and leg trembled violently when used, and the left leg became perfectly rigid. The patient was very drowsy, and seemed to suffer from some headache; but he was never sick, and his appetite was good. His head was slightly retracted. On Oct. 8th he seemed much worse; he vomited three times, took his food badly, and the temperature rose to 103·2°. Subsequently he became more drowsy, his right eyelid drooped, the pupils became unequal, and repeated attacks of general rigidity (sometimes accompanied with foaming at the mouth) supervened, and he died on Oct. 15th. On post-mortem examination, I found an acute recent basilar meningitis. Besides this affection, which was no doubt the immediate cause of death, a large caseous tubercular mass was seen, involving both optic thalami and almost completely obliterating the third ventricle (Fig. 9). The right optic thalamus was the more completely disorganised of the two. The specimen which I now show was hardened in alcohol, and on section it was then seen that on the left side the internal capsule, though pressed upon by the new growth, was clearly defined and looked fairly natural, while that on the right was unrecognisable. The tubercular mass was confined to the optic thalami, and did not involve either nucleus of the corpus striatum. A very small caseous tubercle was also found on the internal aspect of the left occipital lobe, but the rest of the organs were healthy.

It is well known that diseases of the optic thalami and corpora striata are not accompanied by any such symptoms as were present in this case, unless the internal capsule is involved, and the paralysis, tremors, and rigidity of limbs must be attributed to the invasion of this strand of fibres, proceeding from the motor convolutions; while the convulsions of the last week were the result of the recent meningitis. (This case has been already recorded by Dr. Bristowe, in *Brain*, vol. vi., p. 167.)

Case of large Caseous Tubercle of the Pons Varolii, producing Persistent Rigidity of the Neck, Back, Arms, and Legs.—C. C——, aged two, was admitted into St. Thomas's Hospital, under the care of Dr. Ord, on Oct. 4th, and died on Nov. 7th, 1881. The mother was attending Brompton Hospital at the time, and she had lost one of her three children from consumption. The patient was healthy until three months ago, when he began to have diarrhœa and to lose flesh, but had no vomiting. A week before he came in he had two convulsive fits. He had had pain in the head, and had been very fretful and drowsy. On admission, the child lay in a dull and listless condition, taking but little notice of anything, and only crying when disturbed. The head was drawn strongly backwards, and kept stiffly in that position. The back was likewise rigid. The arms were flexed, and the legs and feet extended, all being quite rigid. Patellar reflex was very brisk. There was no loss of sensation; deglutition appeared to be imperfectly performed. The pupils were dilated, but equal; and Mr. Nettleship pronounced the fundus of both eyes to be natural. Pulse 120. Loud rhonchi were heard over both lungs. The urine was free from albumen. During the rest of his life he became more and more drowsy, and had varying degrees of hyperæsthesia, but never loss of sensation. Rigidity of neck, trunk, and limbs continued without intermission, though it varied considerably in degree. Slight left internal strabismus and partial paralysis of the right facial nerve came on; and deglutition was more and more difficult, the food running out at the corners of the mouth. The fundus of the eyes was repeatedly examined, even as late as Nov. 6th, but no changes were found. The temperature, with very rare exceptions, was normal. On post-mortem examination I found the cerebro-spinal fluid much increased, and the lateral ventricles moderately distended with serum. There was slight basal meningitis, but the hemispheres were free from tubercular disease. In the cerebellum and pons were large greenish tubercular masses of rather irregular outline, that in the latter being in the position marked in the figure. It occupied almost the entire extent of that division of the brain (Fig. 10), having only a thin sheet of white matter around it. Longitudinally, it extended the whole length of the pons, but seemed to stop short of the medulla oblongata. Unfortunately, no microscopic examination of the spinal cord was made. The lungs were thickly studded with miliary tubercles, but the other organs appeared to be healthy. The masses in the cerebellum were all situated superficially in the cortex, and did not extend deeply into the substance of the organ.

FIG. 10.

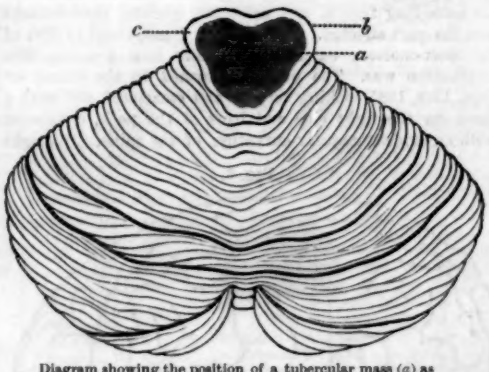


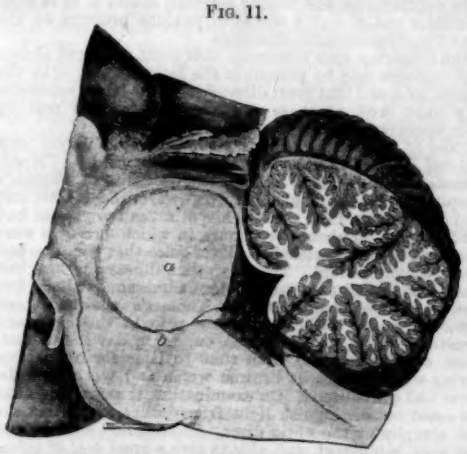
Diagram showing the position of a tubercular mass (*a*) as seen in a vertical section through the pons (*b*). The rim (*c*) represents the unaffected nerve substance.

In this instance, again, the muscular rigidity must be referred to pressure exerted by the tumour upon the fibres of the pyramidal tracts in the pons; for tumours situated in the superficial parts of the cerebellar cortex are of pretty frequent occurrence, and are not found to give rise to any such symptoms. I shall presently relate a case in proof of this assertion.

Case in which a Tubercular Mass occupied the Aqueduct of Sylvius, and produced Tremors, Paralysis, and Spasmodic Contraction of Muscles.—E.B. ——, aged seven, was admitted

into St. Thomas's Hospital, under the care of Dr. Bristowe, on August 2nd, 1882, and died on November 30th in the same year. His family history was unimportant, and the child himself had never suffered from fits, or from any serious illness, except from a blow on the head, which he received at the age of four, and which laid him up for a month. From this he perfectly recovered, and it was not until the end of May, 1882, that his present illness began. Having gone to bed quite well one night, he awoke next morning, throwing himself about, and he was found to have lost power in all his limbs, but most markedly in the right arm and leg, and he was unable to walk properly. He was said not to have vomited or lost consciousness. His speech was affected from the beginning, and his eyes about one week after the commencement of his illness. He was becoming weaker and thinner every day, and the tremors in his limbs, which were noticed at first, were becoming steadily worse. His bowels were confined, and he had lost control over his bladder; he was very drowsy, but his memory was good. He had all along been free from headache, vomiting, and convulsions. On admission the child was found to be rather thin and drowsy. He lay apathetically in bed, but could be easily roused if spoken to. He had weakness in the arms and legs, and when he walked his legs seemed to drag. The most striking peculiarity in his condition was, however, the tremor with which all his movements were accompanied. The head, neck, jaws, trunk, arms, and legs were all similarly

FIG. 11.



Drawing of a large tubercular mass (*a*) occupying the aqueduct of Sylvius, and by its pressure producing a cup-like depression in the pons (*b*). The section is vertical and longitudinal.

affected. When he used his hands and arms the tremors in them were marked, of rather short excursion, sometimes in the direction of movement, and sometimes at right angles to it. The jaws trembled when he used them, and speech was slow and drawling. The tongue was protruded straight, and when he smiled the mouth was drawn somewhat to the right; hearing was normal. All the muscles of the eyeballs were more or less weakened. There was ptosis on both sides, and the internal rectus of the right eye was markedly affected. The superior and inferior recti on right were likewise weak, as were the muscles of the left eye, though not so weak as those on the opposite side. Both pupils acted well to light and to accommodation, the right being a little larger than the left; no anæsthesia was present. The patellar and plantar reflexes were normal, and there was no ankle-clonus. The temperature was natural, and all the organs, except the brain, appeared to be healthy. During the rest of his life the tremors gradually increased, paralysis became more marked, and attacks of spasmodic contraction of the muscles of the limbs and trunk occurred from time to time. On some occasions the legs were noticed to remain for a while rigidly extended. The patellar and plantar reflexes became exaggerated. The patient grew more and more drowsy, and passed his evacuations in bed. The temperature presented only occasional slight elevations until November 26th, four days before death, when it rose to 101·2°; and it subsequently reached 103·8° on the 29th, the day before death. Throughout the patient's illness there was a singular absence of headache, vomiting, and optic neuritis. Though frequently examined, the fundus of the eye presented no abnormal appearances until November 26th, when there was thought to be neuritis. After death, Dr. Edmunds found distinct microscopic evidences of this condition. Another curious point was that the tremors were now and then either greatly diminished or absent for a day or two, and then returned with all their former intensity. At the necropsy the body was much emaciated, and rigor mortis was present only in the lower extremities. The spleen and lungs contained a few tubercles, and those in the spleen were caseous. All the other organs were healthy, with the exception of the brain. Its surface was sticky, and the veins were gorged with blood. At the base, in the interpeduncular space, the membranes were opaque and there was fluid in the optic sheath. Miliary tubercles were present in the Sylvian fissures, and the ventricles were moderately distended. There was a large caseous mass in the region of the corpora quadrigemina, which was round in shape and as large as a medium-sized marble, and which is well displayed in the preparation before you (Fig. 11). It lay as if wedged in the aqueduct of Sylvius, which was enormously distended. On the upper surface of the tumour were the thinned and flattened corpora quadrigemina, while its lower rounded margin rested upon the upper surface of the pons and crura cerebri. Here it occupied a cup-like cavity, which its downward pressure had produced. No other important structures were injured by the tumour.

In this case the usual phenomena of pressure upon the fibres of the pyramidal tract are again well represented. Paralysis and tremors occurred first, then attacks of rigidity. Had the child lived longer and the growth of the tubercular mass progressed, the pressure exerted by it upon the pons and crus cerebri would, no doubt, have produced the final stage of persistent rigidity. The recent tubercular meningitis cannot be said to have produced the tetanic seizures, as the latter occurred months before the patient's death. This case and the next which I shall relate have already been published by Dr. Bristowe in *Brain*, vol. vi., p. 167.

Case of Tubercular Mass occupying the Left Lobe of the Cerebellum, and pressing upon and producing Softening of the Pons and Medulla; Persistent Rigidity of Limbs.—A. G. J——, aged four, was admitted into St. Thomas's Hospital, under the care of Dr. Bristowe, on Dec. 30th, 1878, and died on August 6th, 1879. He had been a healthy child until three months previously, when he was ill with measles and whooping-cough. He began to have fits, which occurred about once a day at first, and then twice a day. He had also been suffering from severe pain in his head, occasional vomiting, and for about two months his mother had noticed that he squinted. The father was said to be asthmatic, and the mother had a weak chest, but their two other children were healthy. On admission the patient seemed to be a sensible child, but quite blind. The pupils were widely and equally dilated, and contracted slightly to light. When lying in bed he could move his arms and legs, but the former were tremulous and ataxic. When placed upon the ground, the patient laughed hysterically, but could not stand, though he could move his legs forwards when supported. The limbs appeared to be equally affected on the two sides. The mouth dropped slightly on the right side, and the tongue was protruded to the right. The pulse was 140 and regular; respiration was easy. The patient passed all his evacuations in bed. There was well-marked optic neuritis in both eyes, the outline of the discs being irregular and blurred, the veins large, the arteries small, and the whole presenting a streaky appearance. Between the time of admission and his death the patient had many fits, in which he was unconscious—the legs remaining rigidly extended, and the arms being flexed and then extended several times in succession. A certain amount of left facial paralysis developed, so that the patient could not close the eye of that side, and the left external rectus was partially paralysed. His arms became more tremulous, the right being more affected than the left; his speech was very drawling. He remained for long fairly intelligent, had no deafness, and was not much troubled with headache or vomiting. From February onwards the arms and legs became persistently rigid, although the degree of rigidity varied. Finally, the child became emaciated to the last degree, and lay perfectly still, taking food well when it was offered him, but showing very few signs of life. He died on

August 6th. At the post-mortem examination there was little evidence of important pathological changes in any of the viscera except the brain. The head was very large, all the sutures were separated, and the bones were movable. There was no subarachnoid fluid, but the ventricles were greatly distended, and the substance of the hemispheres reduced to a thin, soft sheet of nerve substance. The left lobe of the cerebellum was entirely occupied by a firm tumour, of the size of a Tangerine orange, yellowish-green in colour, semi-transparent, and consisting of closely placed, concentric layers. The relics of cerebellar tissue remaining on its surface were soft, as was the neighbouring part of the posterior cerebral lobe. The tumour was adherent to the tentorium cerebelli, and the pons and medulla were pressed upon by it, and somewhat softened. The right lobe of the cerebellum was healthy. Another small tubercular mass was found in the grey matter on the orbital surface of the right frontal lobe. In this case, again, persistent rigidity was the result of pressure which the tumour exercised on the medulla oblongata and the pyramidal tracts which run in it. For it will be shown presently that without such pressure tumours of the cerebellum do not produce such phenomena, and that distension of the ventricles with fluid is not sufficient to explain them.

These four cases appear to me to be of great interest as representing diseases affecting a certain portion of the brain, and capable of being localised during life. The region referred to extends from the basal ganglia to the medulla oblongata, commencing at that spot where the pyramidal tracts begin to converge as they pass between the central ganglia, and occupying further on the pons and medulla oblodgata, where the pyramidal tracts lie in close contact. If the motor tracts be affected simultaneously, or quickly one after the other, in the way about to be mentioned, the disease is likely to be situated between the basal ganglia above and the medulla below, and is in all probability a tumour. The earliest symptoms referable to the pyramidal tract are tremors; then come paralysis and rigid contraction, which is finally permanent; and besides these there may occur from time to time attacks of tetanic spasms, affecting most of the muscles of the body. The phenomena of chronic spasm are due to gradual pressure on the motor tracts, proceeding from the central convolutions of the brain; and the fact that both sides of the body are attacked indicates that the disease is situated at a part where the pyramidal tracts are in close proximity to each other. If the case be seen early, probably all these symptoms, tremors, paralysis, and rigid contraction, will occur before the end; but if the patient do not come under observation until late, only some of them may be observed. Thus, in the case where the optic thalami were gradually invaded, and in the case of cerebellar tumour pressing from above on the medulla, all occurred; whereas, in the case of the large tubercular mass almost completely occupying the pons, only the later stage of persistent rigidity was seen. In determining the exact seat of the tumour, whether in the optic thalami, corpora striata, pons, or cerebellum, we must consider the other symptoms referable to the special nerves involved, which arise at different levels along the base of the brain, and also whether there are, or have been, symptoms which suggest cerebellar disease. Moreover, optic neuritis is very constant, and early in its appearance in cerebellar disease, and often late when the tumour is higher up. I would not have it understood that all tumours in these positions give rise to the phenomena described, for soft succulent ones often do not; but if the symptoms I have pictured be present, the disease is probably a hard slowly growing tumour in the area mentioned. In all the cases just related the tumour was a large tubercular mass; and the early stage of such tumours is shown in a specimen on the table, which was taken from the body of a baby who presented no obvious symptoms of cerebral disease. A caseous nodule can be seen (Fig. 12) occupying the lower third of the external segment of the lenticular nucleus. In a drawing of a microscopic section of this mass a large vessel is seen, and close by the vessel lies a colony of well-stained tubercule bacilli (Fig. 13). But interesting as this series of cases is from the point of view already considered, they are still more so in their bearing upon the question of the functions of the cerebellum and its relation to muscular spasm. In THE LANCET of 1880, vol. i., p. 122, Dr. Hughlings Jackson has written "On Tumours of the Cerebellum," and speaks of "cerebellar rigidity." "I suppose," says he, "the cerebellar rigidity to be owing to unantagonised cerebral influx (rigidity in hemiplegia being owing to unantagonised cerebellar influx), and the tetanus-like seizures to be owing to cerebellar discharges analogous to those cerebral discharges which produce unilaterally beginning (epileptiform) convulsions. But there is the obvious objection that the two symptoms, with the cerebellar disease, may be owing to interference with the corpora quadrigemina (electrical excitation of which produces tetanus-like states), or to interference with the medulla oblongata." Further on in the same volume of THE LANCET, p. 522, Stephen Mackenzie has a paper on the same subject, in which he expresses the opinion that "the reeling gait and tonic spasms are both expressions of disorder of the locomotory apparatus, of which the cerebellum is the governing centre." In comparing the tetanus-like seizures with tetanus, he goes so far as to say, "the range of the two is so much alike as to afford the strongest reasons for the belief that tetanus is an affection of the cerebellum." Now, if the same rigid contractions and the same tetanic seizures occur in disease of other parts at the base of the brain, they cannot be held to be characteristic of cerebellar disease. Hughlings Jackson says: "This universal rigidity, as a condition arising from cerebellar disease, I have seen only when the tumour has been in the middle lobe," and again: "In the case of extensive rigidity and tetanus-like seizures, the tumour has been of the middle lobe, and has been large." These remarks really furnish a clue to the matter. I would put the case thus: a tumour of the cerebellum does not produce contractures and tetanic seizures, unless it be in such a position and of such a size as to produce pressure on the pons Varolii or medulla oblongata.

The following case illustrates this point well, and shows that tumours may be present in the lateral lobes, or in the central lobe, and that great distension of the latter ventricles may exist without these muscular contractions making their appearance.

Case of Tubercular Masses, both in the Central and Lateral Lobes of the Cerebellum, unaccompanied by Tetanic Spasms.—E. C——, aged ten, was admitted into St. Thomas's Hospital, under the care of Dr. Bristowe, on Sept. 13th, and died on Dec. 5th, 1877. At the age of seven the patient had a fit, lasting for about two hours, in which her eyes were fixed and her hands clenched. Ever since that time she had been becoming blind. The only other illness she had had was "low fever," two years before admission. About five months before coming to St. Thomas's she had been suddenly seized with very severe pain in the head and vomiting, which lasted, off and on, for a day and a half. These attacks recurred from time to time for five weeks, during which her sight became worse and worse, but she never had convulsions. On examination, it was found that she could not distinguish light from darkness, and that she had atrophy of the optic discs. She had no deafness, and was very intelligent, and able to give a great deal of information about her illness. Her head was somewhat hydrocephalic in shape, and the forehead prominent. She kept it fixed, and said it hurt her to let it drop backwards. When seated the legs appeared to be quite strong, and it was impossible to detect any weakness in them when one tried to flex or extend them against her will. When held by the hands she could walk pretty well, but when she was left to stand alone she quickly lost her balance. The same occurred when she tried to walk, and she seemed to have considerable incoördination of the legs. There was a tendency to fall to the right side, though she was said previously to have usually fallen to the left. When standing up and made to lean a little backwards she did not fall, but ran backwards. During the rest of her life she had frequent attacks of severe pain in the head, accompanied by vomiting and a feeling of great giddiness. Her temperature remained normal, and she had no tetanic spasms or contractures. She was found dead in bed on the morning of December 5th. At the necropsy, there was no evidence of meningitis, but the ventricles of the brain were distended with clear fluid, twelve ounces being removed and measured. The convolutions were flattened, and the whole extent of them collapsed when the ventricles were emptied. The optic nerves were markedly atrophied. The lateral lobes of the cerebellum were both very soft and swollen, and the left was adherent to the dura mater. There were several tumours, both in the central and in the left lobe, which appeared to be tubercular masses with the centres broken down. Their size varied from that of a pea to that of a medium-sized marble; their circumference consisted of a pale, rosy-grey, semi-translucent

hard tissue, and their centres of a puriform fluid. The other organs were healthy.

In the class of cases which I have been discussing, tremors and paralysis are probably due to slight interference with the functions of the fibres of the pyramidal tracts, persistent rigidity to still greater interference, while the attacks of tetanic spasms may resemble the convulsions which are observed in connexion with cortical tumours of the brain. In the case of cerebral tumours, the pressure is exerted upon the cortical grey matter; in the cerebellar cases, upon the grey matter in the floor of the fourth ventricle, and not upon that of the cerebellum itself, for I have seen cases in which the central lobe of the cerebellum has been completely destroyed by tumours, but in which no pressure was exerted upon the medulla oblongata, and no rigidity was observed during life. It is interesting to note, in relation to this question, that Nothnagel has found that irritation of these parts is particularly liable to produce convulsions; so much so that he has supposed a special convulsive centre (Krampfcantrum) to exist in the pons, which is readily brought into action, either directly or reflexly, by stimulation of a spot in the fourth ventricle. I have said that the tetanic spasms "may" be due to pressure on the grey matter of the floor of the fourth ventricle, because they are capable of another explanation; they may, in fact, be the result of varying pressure upon the pyramidal tracts. In the next lecture I shall relate a case where a tumour, pressing upon the cord from without, produced similar spasmodic attacks; and they are also seen in other diseases affecting the lateral columns of the cord.

Foster, in his work on Physiology, says: "We must consider the cerebellum as an important organ of coördination, though we are unable at present to define its functions more exactly." This probably represents our knowledge of the functions of the cerebellum, and it is in keeping with pathological experience; and I do not think we are justified in considering that disease of it produces spasmodic contraction of muscles, except indirectly, by pressure upon underlying structures.

ON SOME

MODERN REMEDIES IN HEART DISEASE.

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I NOW turn to the evidence, in cases under my own care, of mitral regurgitation in which caffeine citrate was administered. It is to be borne in mind that all these were cases of great gravity, in which the resources of ordinary treatment had been for the most part exhausted.

1. *Effects on the excretion of urine.*—In the following table insignificant variations have not been recorded. The signs < and > indicate a gradual daily increase to or a gradual daily decrease from the amounts stated.

TABLE I.—*Showing the daily amounts of Urine, in ounces, in cases of Mitral Regurgitation, treated by Caffeine Citrate.*

Case.	Before caffeine.	During administration of caffeine.	After caffeine.
1	12	36, 40, 114	180, 172, 114, 68, 57
2	—	24, 42, 47, 52	40, 32, 28
3	—	32, 64, 112, 117	—
4	10, varying to 20	20, 30, 36	48, 20, 32>15
4a*	—	16<27, 65>36, 10	—
5	15, 20, 17	28, 20, 10, 25	—
6	50, 18, 15	30, 34, 20, 25>15<26	18, 14, 20>10<15, 20
6a*	—	20, 18, 15	—
7	17	35>12<30, 25	10
8	25, varying to 36>24	30, 29>11>6	—

* Readministration.

It must be accorded that the evidence of these cases proves the citrate of caffeine to be, in cases of mitral regurgitation, a powerful diuretic. It is shown that the amount of urine passed during a considerable portion of the period when the drug was administered was generally in excess of the diurnal amount passed previously. In some cases the effect is very striking; for instance, in Cases 1 and 3, in which the daily amount ran up in the one case from 12 oz. to 114 oz., and in the other from 32 oz. to 117 oz. In both these cases ten-minim doses of tincture of digitalis were administered with the caffeine citrate, in the first case in three-grain, in the second in five-grain, doses three times a day. It is also, in my opinion, indicated that the influence of the drug as a diuretic may be prolonged beyond the time of its actual administration. Cases 1 and 4 tend to show this, and to indicate that the dictum that caffeine is not cumulative in action must be reconsidered. The cases, however, abundantly prove another proposition—that the diuresis produced by the drug is not invariably salutary, and that the free outflow of urine is not an index of rehabilitation of the general vital powers. In Case 1 the effects were remarkably favourable; there existed extreme ascites and œdema in a woman of fifty-three, the left ventricle being much dilated and hypertrophied; then occurred amelioration and disappearance of all the symptoms, and the patient left the hospital feeling well. There can be no doubt that here the effects were rapidly beneficial. A like result was manifested in Case 2, in which there was evidence of aortic obstruction as well as mitral regurgitation. This case was subsequently treated by convallaria, but the maximum of diuresis was markedly during the *caffeine* period. This patient recovered from all her very distressing symptoms, and went out feeling well. In Case 3, however, one of extreme severity, in which pericarditis, signs of embolism, and renal complication occurred, the patient died at the very time that the amount of urine passed in the day had reached the high figure of 117 oz. May prolonged administration tend to diminish or exhaust the diuretic effect? In Case 4 the second administration was followed by a steady and gradual increase to a maximum daily excretion of 65 oz., but the administration being continued the outflow fell to 36 oz., and then to 10 oz. In this case aortic disease coexisted; the patient died. In Case 6 there was a slight diminution under the protracted influence, but here there were very severe complications—viz., empyema and renal disease; this patient died, death being, one might say, inevitable. In Case 8, in which death occurred, there was a steady diminution of the urinary outflow during the administration; but here, in a woman of sixty-four, there existed great ascites and œdema, with advanced granular disease of the kidneys. Considering that in all these cases the great severity of the complications might in themselves constitute a constant and progressive cause of enfeeblement of cardiac muscle, we should not conclude that the urinary inadequacy was due to any action of the drug itself; it might with so much probability be due to a gradual extinction of the powers.

2. *Effects on pulse and respiration.*—The following table indicates the results:—

TABLE II.—*Showing rates of Pulse and Respiration in cases of Mitral Regurgitation treated by Caffeine Citrate.*

Case.	Before caffeine.	During administration of caffeine.	After caffeine.
1	Pulse 117	100, 94, 96	95
	Respiration	30>20	—
2	Pulse	92>56	74>57, 70, 72
	Respiration	30>23	21
3	Pulse	120, 144, 132	—
	Respiration	32, 36, 30, 28	—
4	Pulse 72, var. to 84	96, 112	—
7	Pulse 78 ,, 90	96	120
	Resp. 48 ,, 36	36	54
8	Pulse 100 ,, 114	*	—

* Became quick, small, and weak. Insomnia. Became worse, and died.

It will be noted that the data in two of the cases have been omitted; this has been because they were variable or doubtful. There is evidence, however, as regards some of the cases, that the rates both of pulse and respiration were reduced under treatment by caffeine. In Cases 1 and 2 the influence was very decided. The sphygmogram taken shortly after admission (Fig. 1) shows with insufficient volume a great irregularity with interpolated systoles. After five days of treatment the second sphygmogram was taken, and it is seen that the pulse has become nearly regular

(Fig. 2). In Case 2 the combined effect of convallaria and caffeine is well shown. The pulse, which at commencement

FIG. 1.

Sphygmogram in a case of mitral regurgitation, with œdema and ascites.

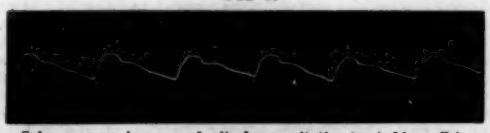
of treatment was 92, had now, after six days of treatment, not only become reduced in frequency to 52, but had

FIG. 2.

Sphygmogram in the same case after five days' treatment with caffeine citrate.

acquired marked evidence of tension, as shown by the sphygmogram (Fig. 3). In the other cases, complicated as

FIG 3.



Sphygmogram in a case of mitral regurgitation treated by caffeine and convallaria in combination.

I have stated them to be, there was no such favourable reaction, though in Case 7 it is shown that on the omission of the caffeine the rate of pulse and respiration rose in very considerable degree.

3. *Effects on the temperature of the body.*—In Case 1 the temperature was nearly normal throughout. In only one case (3) was there a rise of temperature under caffeine; then it was from subnormal to 100° F. In the other cases the reduction was from a subfebrile temperature to normal or subnormal. In Case 7 the temperature previously to the administration varied between 99° and 102°, and during the administration between 98° and 100°. It may therefore be concluded that in such cases as we have been considering, caffeine tends to depress the temperature. I think we are justified in concluding that caffeine, in the treatment of cases of mitral regurgitation in which failure of compensation has occurred, is a valuable agent; that it is a powerful diuretic, and is therefore very valuable in cases manifesting dropsy; that it tends to increase the force of the heart, to calm the respiration, and reduce the temperature; but that it fails in some cases to be of benefit, even though it may manifest its diuretic effect. Like other heart-tonics, it fails especially in pericarditis, where probably the direct enfeebling agency of the disease upon the myocardium is a cause which operates against it.

I now turn to another remedy of comparatively modern introduction—

Convallaria majalis.—This plant, the well-known lily of the valley, has long been used for the treatment of dropsy in Russia, in the form of an infusion of the flowers and leaves. M. Germain Sée of Paris, made a careful study of it as a therapeutic agent, and I called attention to its use in my Lettsomian lectures for 1883. In those lectures I said that I looked hopefully to the drug in the treatment of failure of the right heart in cases of mitral stenosis. Its therapeutic efficiency resides in the principle convallamarin, a glucoside, which may be administered in doses of from half a grain to two grains daily: on account of its cumulative tendency only one dose of convallamarin should be administered each four hours. The following are its preparations and administration:—1. Extractum convallariæ is an aqueous extract of the flowers and stems (two parts) and roots and leaves (one part), the dose being from two to eight grains. 2. Extractum convallariæ fluidum, dose from two to ten minims. 3. Tinctura convallariæ, dose five to thirty minims. Convallaria is classed with digitalis as a stimulant of the muscular fibre of the heart, and is said to act more slowly and more persistently than the latter. Within the last two years convallaria has been extensively used in the treatment of various forms of cardiac disease. The experience of various observers in regard to it is very contradictory; so great is the discrepancy that it has been suggested that the activity of the plant varies with the locality in which it is grown. If this be a difficulty, of course it can be obviated by the employment of the active principle—convallamarin. According to many observers—e.g., Germain Sée, Bochefontaine, A. H. Smith, Labbée, Frederick Roberts, Ott, and others—very valuable results are produced by the drug in cardiac diseases. On the other hand, Leubuscher has declared that it has proved in his hands worse than useless as a remedy. Heller has also given an unfavourable report.[1] Professor Jaccoud says concerning it:—"It is a very untrustworthy medicament, and many cases are quite refractory in regard to it. You must not count upon it, and in cases of urgency you would be wrong to fill up by its administration the intervals of a digitalis course; these you should rather confide to caffeine. If this latter is not well borne, we have no other resource than convallaria; but, I repeat, do not count too much upon it."[2] In estimating the value of such a drug, it is most important, in my opinion, to group the cases. Those on which the conclusions of the various observers have been based were very different forms of heart disease and heart disturbance. I now proceed in the same manner, as in the case of caffeine, to inquire concerning the influence of convallaria in mitral regurgitation. In the cases compressed in the following table convallaria was administered in doses of five grains of the extract or twenty minims of the tincture three times in the day.

TABLE III.—*Showing the daily amounts of Urine, in ounces in cases of Mitral Regurgitation, treated by Convallaria.*

Case.	Before convallaria.	During administration of convallaria.	After convallaria.
1	20	21, 25, 30>16<30>20	30>20<30, 26
2	20, 30	35, 17, 22, 20, 27, 22	35, 22, 27, 30, 25
3	—	45, 48, 40<60, 60, 60>52<60	—
4	20, 40	48, 64>10	—
5	13<35>10<80>35	20, 28>15	—
6	—	17	35, 30>10

If we took the evidence of these cases as indicating the action of convallaria in cardiac disease generally, we should conclude that it is a feeble diuretic. I must ask that judgment be withheld until after consideration of its action in mitral stenosis. It is seen that in four of the cases a slight diuretic action was soon manifest; the maximum diuresis was attained in one, two, four, and eight days; except in Case 3, there was on continuation of administration a tendency to a diminished excretion. In Case 6 the drug was only given for two days; and then, as urine was very scanty, digitalis and caffeine were substituted, with the result of a very decided but temporary increase. So far as these cases show, the influence of convallaria as a diuretic in cases of mitral regurgitation is far inferior to that of caffeine.

The effects of convallaria on pulse and respiration in cases of mitral regurgitation are indicated in the following table

TABLE IV.—*Showing rates of Pulse and Respiration in cases of Mitral Regurgitation treated by Convallaria Majalis.*

Case.	Before convallaria.	During convallaria.	After convallaria.
1	Pulse	120>104<120	120>108
2	Pulse 114	112>108	104<124
	Respiration 36	34>24	34>20
3	Pulse	72	—
	Respiration	20	—
5	Pulse 134, 140>104>76	70	—
	Respiration 28<36>24	No imprt. of dyspnœa	—
6	Pulse	Varying betw. 78 & 90	Var. betw. 96 & 120
	Respiration	,, ,, 36 & 48	Increased to 54
7	Pulse	96, 120>108	—
	Respiration	22<40>20	Much imprvt. foll.
8	Pulse 120, 98, 88	108>84, 90	84<108>72
	Respiration 27	36>30	28, 24, 20

It is seen that, as a general rule, the rates of pulse and breathing are reduced under the influence of convallaria.

[1] See Dr. Mitchell Bruce's Summary in Cassell's Year-book of Treatment for 1884, p. 5, *et seq.* [2] Semaine Médicale, Jan. 13th, 1886, p. 10.

That the force of the heart and tension of the pulse coincidently with a good regularity of rhythm *may* be brought about I have graphic evidence to prove. Case 5, however, shows that, even though the pulse-rate be very greatly reduced, there may be no relief from the embarrassment of respiration. This case was one in which there was much cardiac dilatation, and it was complicated by embolism of the right axillary artery. The pulse-trace manifested much irregularity and pronounced dicrotism. Case 7 was complicated with aortic obstruction and regurgitation. Three grains (a smaller dose than that administered in all the other cases) of the extract of convallaria were given three times a day; here, though there was during treatment a temporary increase of the rates of both pulse and respiration, the rate of the latter became notably reduced. This patient was discharged after having manifested much improvement.

Effects on temperature.—In only two cases was there a rise of temperature under the treatment by convallaria; in neither did it rise above 102°, and in one it fell to 99° at the end of the period of treatment. Generally there was after commencement of treatment a slight fall of temperature, and this sometimes occurred suddenly. The lower temperature persisted for some days after the cessation of convallaria, and then as a rule the temperature rose again or became irregular.

General effects.—Cases 1, 4, 5, and 6 manifested no signs which seemed to me to indicate that the drug exerted any marked influence for good, or that it was in any way superior to digitalis. Two of these cases died, one of them being complicated with pericarditis, pleuritis, and pulmonary infarction; the others tided over their difficulties, and were ultimately discharged from hospital. In Case 2, where aortic disease was combined with mitral, much general improvement was manifested two days after the termination of the treatment by convallaria; one week afterwards there was relapse with extreme dyspnœa and death. Case 3, which was also complicated with aortic disease, manifested great improvement; Case 7, with a like complication, also; and in Case 8, which was of the hopeless form of post-partum endocarditis, manifested improvement during the period of convallaria treatment, the temperature then being notably subdued, to manifest irregular rise and fall subsequently.

My general conclusion is that in convallaria we have a drug which may be occasionally used with advantage in cases of mitral regurgitation; that it should be continued for no longer than weekly periods without interruption; that in cases manifesting dropsy it should be accompanied with caffeine; but that for general and systematic administration in mitral regurgitation it will not (except at intervals) usefully supplant digitalis.

(To be concluded.)

THE

ANTISEPTIC TREATMENT OF WOUNDS.

By SURGEON-MAJOR W. GRAY,

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THE following account of my experiences in the pursuit of antiseptic surgery in the wards of the Jamsetjee Jejeebhoy Hospital will, I trust, prove of interest to those who may be engaged in similar investigations. To render it of real value the failures as well as the successes will be described; there is as much to be learned from the one as from the other. The experiments I am about to record were instituted with the object of devising an antiseptic method of dressing wounds which should be not only effective but cheap and easily and quickly applied. The various modifications of treatment were at first employed with amputation and other operation wounds, and latterly with wounds of all kinds. It is only with amputations, however, that I shall deal at any length for the present. The series of cases consists of forty-two amputations successively treated from Nov. 1882 to Dec. 1884, and of these I shall give a short account, either singly or in groups, according to the mode of treatment adopted, and its results. To save time, it will be understood that each patient was in the best condition possible under the circumstances, and that extreme cleanliness of the part to be operated on, of the instruments, assistants, and materials of all sorts used, was insisted upon, and ensured by personal supervision. In fact, to be certain that everything was perfectly clean I always attended to this part of the work myself. The dressings, ligatures, and lotions I kept in my own custody. Mistrusting, as a rule, the purity or quality of the hospital supplies, I usually purchased the first two, the best I could procure, and made the third myself. In this way I possessed an intimate personal knowledge of the materials employed, and in case of failure was in a better position to lay my finger on the weak point of the procedure than if I had to trust to the knowledge or conscientiousness of others. I may also mention that carbolised catgut ligatures, rubber drainage-tubes, and silver sutures were invariably used. I now proceed to detail the cases.

CASE 1.—Female, aged eighteen. Syme's amputation of right foot for sarcoma involving the toes and anterior part of foot. Operation performed on Nov. 3rd, 1882. The stump was washed with a 5 per cent. solution of boro-glyceride, then covered with strips of lint wrung out of the same solution; over this a thick layer of cotton was placed, next a layer of oakum, and the whole was enveloped in a sheet of oiled paper fixed on with adhesive plaster. In this case the temperature remained normal throughout. The dressings were removed for the first time on the twelfth day after operation, when firm union was found to have taken place. The sutures and drainage-tube were withdrawn, a little light dressing applied, and the patient was discharged well on Nov. 24th. On inspection of the first dressing at the time of removal it was found to be perfectly sweet; not a drop of pus had formed, but the cotton and oakum were more or less moist, obviously from retention of the cutaneous exhalation by the waterproof.

CASE 2.—Male, aged thirty. Flap amputation at the middle of the right leg for disease of the ankle-joint. Operation, Jan. 16th, 1883. Dressing as in the preceding case. Temperature remained normal. The stump was opened for the first time on the ninth day. Union firm. After-treatment as before. Patient discharged cured on Feb. 12th.

CASE 3.—Male, aged twenty-five. Flap amputation of right thigh, at lower third, for knee-joint disease. Operation, Jan. 24th. Dressings as before. On the second day the temperature rose to 100·2°; and on the fifth day, it being evident that suppuration had occurred, the dressings were taken off and the stump treated as an open wound. Patient discharged well on April 5th. The failure here was doubtless due to a small portion of diseased tissue, part of a sinus wall having been left behind.

CASE 4.—Male, aged thirty-five. Flap amputation of right thigh, about the middle, for disease of the knee-joint. Operation, Feb. 19th. Parts much diseased. Dressings as before. Temperature rose, as in Case 3, and, suppuration setting in, the dressings were removed. The patient, however, being much reduced and enfeebled from long-continued joint disease, died of exhaustion on March 5th.

CASE 5.—Male, aged sixty. Amputation through right knee-joint for machinery smash of the leg. Operation, March 31st. Dressings as already described, except that dry lint was substituted for cotton, and gutta-percha tissue used instead of oiled paper. Temperature 102° next day, and, continuing at and above 100°, the dressings were taken off on the fourth day. A considerable quantity of pus had already formed. The stump was treated as an open wound, and the patient left hospital well on July 3rd.

CASE 6.—Male, aged thirteen. Amputation at middle of left forearm for machinery smash. Operation, April 1st. Dressings as in the preceding case. Temperature rising, the stump was exposed on the seventh day, when putrefaction to a slight degree was seen to have occurred. The wound was now treated by the open method, and the patient was discharged cured on May 6th.

In the last two cases I am probably nearest the truth in attributing failure to imperfect disinfection of the wound and surrounding parts before applying the dressing. I have observed a greater proportion of failures in accident cases where the flaps include more or less of the injured, though sometimes apparently sound, tissues, especially where there is loose skin or dragged tendons. This injured tissue is often dirty, or it may fail to recover vitality.

CASE 7.—Female, aged twenty-five. Amputation at lower third of right leg for disease of the ankle-joint. Operation,

April 15th. Boro-glyceride dressing. Temperature remaining normal, the stump was not exposed till the ninth day, when firm union was found. Patient discharged well on May 28th.

CASE 8.—Male, aged thirty-six. Amputation just below the left knee for extensive syphilitic necrosis of the tibia. Operation, May 13th. Iodine water was used in this case instead of boro-glyceride, the latter being discarded as too expensive. The covering of oakum was made thicker, and was kept on with a bandage firmly applied. By way of making the dressing air-tight the upper edge of the bandage was secured with a broad strip of elastic. Temperature remaining normal, the dressings were left untouched till the next day, and on removal the stump was seen to be healed. The patient, however, for other reasons, was not discharged from hospital till Aug. 13th.

CASE 9.—Male, aged twenty-five. Amputation at middle of right leg for smash of its lower part. Operation, May 14th.

CASE 10.—Male, aged twenty-five. Amputation through left wrist for machinery crush of the hand. Operation, May 14th.

CASE 11.—Male, aged fifty. Amputation through right knee for railway smash. Operation, May 17th.

CASE 12.—Male, aged thirty. Amputation at lower third of left leg for smash of the foot and ankle. Operation, May 17th.

The dressing in each of these four cases was iodine water, lint wrung out of the same solution, oakum, waterproof, and bandage. Cases 9, 11, and 12 were successful, uniting by first intention; but Case 10 was a failure, and the stump had to be treated from the fifth day as an open wound. The patients were discharged well on June 29th, June 13th, June 9th, and June 29th respectively. Case 11 was a drunkard, and a fat, flabby subject, yet he made the best recovery.

CASE 13.—Male, aged forty. Amputation at middle of left leg for disease of the ankle-joint. Operation, May 21st. Iodine water dressing as before. Death on ninth day from tetanus. The dressing, however, was so far perfectly successful; union had taken place, and there was no sign of suppuration.

CASE 14.—Male, aged nineteen. Amputation below right knee for advanced disease of the ankle-joint. Operation, July 3rd. Patient phthisical. Stump washed with 1 in 1000 solution of corrosive sublimate; it was then covered with two layers of lint wrung out of the solution; over this a thick pad of boric cotton, oakum, waterproof, bandage, and elastic. The result was excellent. Dressings removed on the ninth day, and stump found healed. Patient discharged well on July 23rd.

CASE 15.—Male, aged thirty. Amputation through right knee-joint for mycetoma. Operation, Aug. 16th. Dressings and results as in the foregoing case. Discharged cured on Sept. 7th.

CASE 16.—Male, aged twenty-five. Syme's amputation for spontaneous gangrene of the right foot of one month's duration. Operation, Aug. 19th. Dressings as before. Temperature rose to 101° on the second day and remained so. The stump was exposed three days later, when sloughing of the flap was seen to have taken place. This was undoubtedly due to deficient vitality of the part. A more favourable result would probably have occurred had amputation been allowed higher up. Patient discharged at his own request on Nov. 11th, the stump not even then being entirely healed.

CASE 17.—Male, aged twenty-five. Amputation at right shoulder-joint for railway crush of arm. Operation, Sept. 5th. In this case the old-fashioned open dressing (lint wrung out of carbolised oil) was used. The skin on the side of the chest and over the shoulder was badly bruised, had lost its vitality, and consequently sloughed. The patient, however, made a good though slow recovery, and was discharged well on Dec. 5th.

CASE 18.—Male, aged forty. Syme's amputation for railway crush of the left foot. Operation, Sept. 19th. Dressings as before. Temperature rising beyond 100°, the stump was opened up on the sixth day, when a large portion of the flap was found to have sloughed. Treated from this time as an open wound. Discharged well on Dec. 20th.

CASE 19.—Male, aged thirty. Amputation at the upper third of the right arm for machinery smash. Operation, Nov. 10th. Dressings as before. Removed on the eighth day. Firm union. Discharged cured on December 4th.

CASE 20.—Male, aged forty. Secondary amputation at the middle of the right thigh for tramcar crush. Operation, Nov. 22nd. The parts being more or less inflamed and infiltrated, open dressing was used. Patient died exhausted on Dec. 2nd.

CASE 21.—Female, aged fifty. Syme's amputation of the right foot for disease of the tarsus. Operation, Nov. 27th. Patient a feeble old woman. Dressing, corrosive sublimate solution and boric cotton. Temperature rising, the stump was exposed on the fourth day, when commencing suppuration was seen. Treated from this time by the open method. Patient discharged cured on Jan. 29th, 1884.

CASE 22.—Male, aged thirty. Syme's amputation for railway smash of left foot. Operation, Dec. 14th. Dressings as before. Temperature rising, they were removed on the third day, when a portion of the skin over the inner ankle, which had been separated by the injury from the structures beneath, was found to have sloughed. Stump now treated as an open wound. Final results good, however. Patient discharged well on Feb. 7th, 1884.

It will be noticed that out of five cases of Syme's amputation dressed antiseptically, as detailed above, only one healed without suppuration. In Case 16 the obviously deficient vitality of the parts led me to anticipate the unfavourable result, but as regards three at least of the remaining cases I am unable for the present to explain satisfactorily the failure of the dressing.

(To be concluded.)

ON THE TREATMENT OF SYPHILIS.[1]

By JAMES WILSON, M.D.

THAT the general treatment of acquired, and particularly that of advanced, syphilis in this country is far behind that of the Continent cannot be denied, otherwise why should we be compelled to send cases there so frequently for treatment, and why should an English-speaking race so largely contribute to the support of those places where this specialty is so largely carried out, if our treatment in this country were what it ought to be, certainly what it might be if we more closely followed out the continental principles of treatment, and recognised that syphilis, like other diseases of a blood nature, must be thoroughly and systematically treated if we hope to effect a cure, to say nothing of preventing the terrible relapses so frequent in this disease. The remedies are all right—no fault is to be found with them; mercury and the salts of potassium, particularly the iodide, with their adjuncts, hold good in all countries where the disease is understood and rationally treated. But it is to their mode of application that we must look, and it is entirely, in my opinion, the mode of application that has made Aix-la-Chapelle so famous throughout the whole world for the treatment of syphilis. No doubt it has climatic and other surroundings, such as baths and waters, which in this country we shall never probably possess in a similar degree. Still, there is no reason why the treatment cannot be efficiently carried out in England, and that it should become the exception, and not the rule as it now is, to send bad cases there; and this opinion is not expressed by me without having carefully considered all the means at our disposal, as also from a long sojourn in Aix devoted to the study of the German treatment; and the marvellous results met with there have led me to this conclusion, and impressed me with the desire that it should be more fully carried out in this country than it is.

For a long time before going to Aix I had come to the conclusion that in this country we were far too fond of giving mercury by the mouth, which is the worst of all forms of giving the drug—certainly the most uncertain in its results, the most ineffectual in its operation, and the one most frequently followed by relapses; indeed, these are the cases that later on in life find their way to Aix, then the subjects of advanced syphilis, and that pass from the surgeon to the physician as legacies in our hospitals; and, indeed, I think the physicians here might reasonably complain that a disease in two of its stages essentially belonging to the surgeon, and when so much could be done by efficient treatment,

[1] An address introductory to a discussion at the Medical Society of Liverpool, Nov. 19th, 1885.

should be allowed to pass on to his department, when a much longer time for cure will be required, and when he has no other course to pursue than that of being compelled to deal with the shortcomings of his predecessors. One of the gravest mistakes made in the treatment of this disease is unquestionably the inefficient mercurial course in the first and second stages. Now, I cannot say I was greatly surprised to find my views as to the giving of mercury by the mouth confirmed by the German doctors, but I was struck by the fact that nearly all the cases coming to Aix for treatment had been those in which the drug had been administered by the mouth, and that it was rare to find cases there in which the treatment I am about to describe had been successfully carried out—namely, *inunction*.

Of all forms of giving mercury, that by inunction is the best; not the so-called inunction treatment of this country, however, in which a little mercury is applied, most frequently by the patient himself, to the inside of the thigh or armpit, for, say, a few days, and then discontinued altogether; or the wearing of a belt on which a little mercurial ointment has been spread; this may, and sometimes will, answer in children, but in adults it is totally inefficient and inoperative. For mercurial inunction to be successful the ointment must cover a large surface of the integuments, must be thoroughly and systematically carried out, and the skin must be prepared for the anointing by a bath daily, and, above all, must not, if possible, be performed by the patient himself. When, therefore, a case of syphilis presents itself to our notice in which this treatment can be carried out (for of course it could not be done during the stage of efflorescence), it is pre-eminently the best of all forms of giving mercury. Ample experience has proved the correctness of these views. For the successful treatment by inunction, however, three precautions are necessary:—Firstly, the skin must always be prepared for the absorption of the mercury, and the grey ointment (preferable in many ways to the oleate) must always be administered carefully, and in sufficient quantity; secondly, the system during the treatment must be maintained sound both as regards diet and hygienic surroundings; and thirdly, the inunction treatment must be carried out long enough.

With regard to the first point, that of the preparation of the skin for the absorption of the mercury, in general it is sufficient if the patient take a warm bath of from twenty minutes to half an hour's duration, at a temperature of about 95° or 96°. The body is to be well cleansed with soap, so that the skin is in a fitting state for the reception of the grey ointment. After the bath the patient is to be well rubbed, and a drachm of the ointment is then carefully rubbed in (by an experienced rubber if possible). I very much object to patients rubbing themselves, till I have satisfied myself that they have adequate skill and perseverance for the task, and know how to rub, and I absolutely forbid patients who are weak or have insufficient strength for the purpose. The ointment must be rubbed in with the entire surface of the hand, and with both hands conjointly. So that when, for example, the legs are subjected to the rubbing, the surfaces of the hands glide up and down simultaneously. Gloves, or a pad covered with leather are absolutely to be forbidden, otherwise much of the ointment, instead of penetrating the skin, is lost on the surface of the glove or pad. The accuracy of this fact is easily demonstrated by weighing such gloves after a few rubbings. The mercury is but slightly, if at all, absorbed by the surface of the hands, and absolute prevention is obtained by smearing the hands with soap or lard before the inunction. If due precautions are paid to these points the rubber need have no fear of evil consequences following to himself. The rubbers in Aix, who are in the habit of rubbing some dozen or more cases daily, seldom meet with any inconvenience in their daily vocation, being careful as to these matters of cleanliness and the anointing of the hands with soap. The rubbing should last twenty minutes—ten minutes for the one half of the member rubbed, and ten for the other; and the ointment is to be rubbed in with considerable pressure. I should have said that it is well to divide the ointment into two portions—one half, as above mentioned, for one leg, and the other half for the other. Supposing the legs to be the portions of the body on which the mercurial ointment is being applied, and on which it is always best to commence the systematic treatment by inunction, sometimes less than a drachm of the grey ointment is sufficient to commence with—viz., two scruples (40 grs.). Twenty minutes is quite long enough for the arms and extremities; less for the trunk. Some patients cannot endure the breasts and abdomen being rubbed; in such cases the sides of the body and nates should be selected. It is of great importance that the rubbing be systematic, the different parts of the body being taken in order. For this purpose it is best to commence with the legs on the first day; on the second, both thighs; on the third, the abdomen and breast; on the fourth, the back; and on the fifth, both arms; reverting again to the legs on the sixth day. After the rubbing the patient should lie down or rest quietly for, say, one hour, after which he may go out and walk if the weather permit, or go about his occupation if not too laborious. I always direct my patients to drink a tumbler of Harrogate or Aix water once a day, if not twice; one tumbler in the morning before breakfast, and another about 12 o'clock or a little earlier. Sometimes in people whose skin is sensitive, or who are unduly hairy, the irritation caused by the rubbing and ointment occasionally sets up a little suppuration of the hair follicles, and painful pustules appear. This may be entirely prevented by first shaving the part, and as this condition usually occurs when it does take place on the thighs and legs there need be no difficulty in performing this slight operation. Well cleansing the parts with soap and water while in the bath is generally sufficient to prevent this condition of things taking place. It therefore becomes of the utmost importance that the parts anointed on the previous day should be well cleansed before a second rubbing, while it is always advisable to have recourse to a bath daily for the purpose above indicated, as well as to prepare the skin for the subsequent rubbing. Some people complain that a daily warm bath weakens and prostrates them. I do not think so myself if taken at the temperature indicated—viz., about 95°. Should it appear, however, to do so, then a bath every other day may be taken, though in such cases I would advise a little later on that a vapour-bath be had recourse to once or twice a week.

The second point indicated during a mercurial course is that the system be maintained by a proper and sufficient diet, and due regard paid to clothing and other hygienic surroundings. It is of the utmost importance during the treatment that the patient breathe fresh and pure air; and as the skin and not the lungs is entrusted with the absorption of the mercury, it becomes necessary that the patient should occupy large and airy rooms, and, so far as his strength will permit, take adequate out-door exercise and avoid the risk of catching cold. Most persons of ordinary intelligence may be trusted to guard themselves against this evil, though it is astonishing the difficulty that sometimes occurs to convince people of the importance of this, and further to make them carry it out by clothing suitably and properly adjusted. Then, as to diet, the food must be simple and nourishing, the patients living well, but not overtaxing the powers of the stomach, with absolute abstention from such articles as salmon, eels, mackerel, Finnon haddock, and salt kinds of fish, cheese, salads, and raw fruit. Stewed fruits may be taken, and a moderate use of wine or beer may be allowed in cases where patients are accustomed to their use. The drinking daily of one or two glasses of milk is to be strongly encouraged; indeed, I feel sure that in this country, no matter what form of mercurial administration is employed, whether internal or external, we do not give sufficient milk; in Aix the doctors insist upon milk forming a substantial portion of the daily food, and they have been fortunate enough to obtain a milk as nearly identical to human or mother's milk as it seems possible to get, obtained by a dry-feeding process, the cows never touching green food, but living on a preparation of corn, barley, and wheat-meal with bran, to which a little salt is added; with this mixture the cows are fed twice a day, the intervals being filled up by hay, which is placed in their mangers, of the best quality, and always at their use; they are further allowed to drink as much water as they like,—the result being that a milk highly nutritious and easy of digestion is obtained, which is, I think, at the present moment the nearest approach to human milk that has been produced. Patients from all parts of the world come to drink this milk, and all syphilitic patients are directed to drink as much as they possibly can fresh from the cow, three and four glasses being easily consumed at a sitting, and generally in the afternoon.

Another point to be attended to during the inunction, and indeed all forms of mercurial treatment, whether external or internal, is the state of the mouth. Scrupulous cleansing of the teeth and rinsing of the mouth with a wash made from the

acetate of alumina prepared by mixing alum with acetate of lead in adequate proportions, to which a little aromatic water may be added, is advisable. The formula I am in the habit of using is—acetate of lead, 240 gr.; powdered alum, 330 gr.; distilled water, 16 oz.; aromatic or peppermint water, 8 oz. Dissolve the lead and alum salts separately in the water; mix and stir well together; either filter or let the precipitate settle, and decant the clear solution, to which add the aromatic or peppermint water. It may be used diluted with water if necessary, and the mouth is to be regularly rinsed out from the beginning of the treatment to the end ten or twelve times a day, or even more, and in urgent cases during the night. By so doing salivation is prevented, and if by any means it should occur its ill effects are counterbalanced by the use of the mouth-wash. I might here say that preparatory to any mercurial treatment, whether external or internal, it is always well for any old stumps of teeth to be extracted, particularly if they are in the habit of giving trouble.

(To be concluded.)

CASE OF LYMPHO-SARCOMA IN THE GROIN.

OPERATION; RETURN OF THE GROWTH.

BY F. R. FAIRBANK, M.D., L.R.C.P. LOND.,
SURGEON, DONCASTER INFIRMARY;
AND
F. WALLIS, M.R.C.S. ENG.

THE case reported in THE LANCET of December 19th, 1885, from Westminster Hospital, as having been operated upon for recurrent lympho-sarcoma, is of sufficient interest to warrant a more detailed report of its earlier history.

For several years the patient had suffered from a small tumour in the right groin, below Poupart's ligament. This had given him no trouble, and he was advised by his then medical attendant to leave it alone. As it began to increase in size in the early part of the summer of last year, he sought Mr. Wallis's advice, who requested a consultation with Dr. Fairbank. On July 17th they together saw him. He was an emaciated young man, having an anxious look. He stated that during the last two months the tumour had increased rapidly in size. He had consulted a surgeon in the town where he had been staying, who offered the opinion that the tumour consisted of a hernia with a suppurating gland over it. Poultices were applied and an incision made, which gave vent to hæmorrhage, but nothing else. He then came under Mr. Wallis's care, who ordered ice to be applied locally until the consultation had been held. On examination a tumour was found in the right Scarpa's triangle, measuring about six inches in length by four inches in breadth. It was of the shape of the figure 8—two portions joined by a neck. The upper and deeper-seated portion was soft; the lower portion was firm and implicated the skin, which was of a deep red colour over it. The tumour was movable, and, with the exception of the skin over a part of it, was felt to be distinct from the surrounding tissues. The diagnosis was sarcoma, and immediate removal was recommended.

On July 21st, at his own home, in the presence of Mr. Wallis, Mr. J. Gelston, house-surgeon to the Doncaster Infirmary, and Mr. W. Nicholls, Dr. Fairbank removed the growth. Mr. Gelston administered the anæsthetic known by the letters A. C. E. A lozenge-shaped incision was made round the tumour, which enclosed the whole of the skin implicated. The tumour was found in the subcutaneous tissue, and entirely separate from the surrounding tissues, and external to the deep fascia. There was only one artery supplying it, and this was readily secured. The removal was very carefully and thoroughly carried out. The tumour weighed over 2 lb. When the operation was completed the patient fell into an alarming condition: breathing ceased, and the pulse was imperceptible at the wrist. Artificial respiration and faradisation were kept up for about two hours before he appeared out of danger.

The wound healed rapidly and well up to a certain point. In the centre, where there was the greatest tension, a part about the size of a florin remained open. The patient improved rapidly in general health, and was able to go away from home fourteen days after the operation. There was then no increase in the size of the wound, or any sign of other tumour. About Aug. 22nd, while at Ripon, he noticed a fresh lump in the lower part of his body on the right side, and in consequence came home to see Mr. Wallis. When Mr. Wallis then saw him the wound was about the size of a crown-piece, with the edges irregular, thickened, and hardened. A small tumour, about the size of a pheasant's egg, was noticed above Poupart's ligament. The wound increased rapidly in size. On Oct. 1st another consultation was held. There was then an open wound over Scarpa's triangle, the size of the palm. The edges were indurated and undermined. The floor of the wound was clean and glazed. The femoral vessels were only thinly covered. There was a tumour above Poupart's ligament, the size of a small hen's egg. His general health was then good. Subsequently to this he went to Westminster Hospital, and the case terminated as reported in THE LANCET of Dec. 19th.

Portions of the tumour from Scarpa's triangle were forwarded to Dr. Ernest H. Jacob of Leeds, who has supplied the following report of his examination: "The growth was of varying consistency, from that of a normal lymph-gland to that of encephaloid softness. One portion was adherent to the skin. Microscopically, in some parts the growth was ordinary-looking lymphoid tissue, but there was a large amount in which the cell element was in excess, and presented the appearances of lympho-sarcoma rather than lymphoma simple. There were also signs of caseation and breaking down in the softer parts."

Mr. A. A. Bowlby, of St. Bartholomew's Hospital, also has sent the following report:—"Microscopic description of tumour: It is composed mainly of cells, which are larger, more irregular in outline, and more granular than ordinary lymphoid cells or leucocytes. Here and there a little fibrous stroma may be seen and a few bloodvessels. It is evidently a round-celled lympho-sarcoma."

The report of Mr. Walter Arthur deals chiefly with the condition of the nervous and circulatory systems. It would be very interesting to read what was the condition microscopically of the soft parts removed from Scarpa's triangle, and what was also the condition at the time of death. This case is interesting specially as showing that a comparatively innocent enlarged lymph gland may assume malignant characters of most virulent description.

Doncaster.

INHALATION IN PULMONARY DISEASES.[1]

BY W. H. BLENKINSOP, M.D., M.K.Q.C.P.

IN the treatment of pulmonary diseases our efforts, as I need only in passing observe, are directed more or less to a threefold method of cure—(1) by the administration of internal remedies, (2) by the employment of various external agents, and (3) by the introduction of medicated vapours into the air-passages by the process of inhalation. I am desirous here of drawing attention more particularly to the last-named method, the importance of which was recognised by the older physicians, and was developed early in the present century by Scudamore and others, who severally recommended the use of iodine, chlorine, and tar vapours. In whatever way we regard the action of this special mode of treatment, the fact remains that it is by far the most rational, possessing many obvious advantages over others, particularly in phthisis, and being capable of much further development. Notwithstanding the generally encouraging results, however, of this aid to our other methods, there are certain details connected with its employment which are somewhat indefinite at present, and upon which I think we require a distinctly pronounced expression of opinion. Let me for convenience' sake place my observations under the following headings.

First, I find it of service in speaking of inhalation—which will be further discussed as we proceed—to include within it two allied processes—viz., vaporisation, where hot air or steam is generated, and fumigation, where drugs or scents are volatilised. As regards the last-named process, we are sufficiently conscious of its potency in destroying noxious odours and germs in a sick room; but as to its effect upon the air-tubes of invalids suffering from pulmonary mischief, there is little aid that we can hope to gain from it. For example, if a specific action is required upon the lungs,

[1] Paper read before the Harveian Society, Jan. 7th, 1886.

the continuous saturation of the room with a *powerful* strength of vapour tends to produce headache and other nervous conditions in many patients, with derangements of the digestive organs; whilst the attendants also, whether nurses or relatives, are much inconvenienced by the surcharged atmosphere. Few can be found to tolerate this, notwithstanding there are some amongst us who are much in favour of the plan. If, on the other hand, the strength of a vapour is minimised, to prevent unfavourable consequences, we should find the process of cure somewhat indefinitely prolonged, if it ever occurred at all. In one word, therefore, fumigation may be regarded as a serviceable accessory, when reasonably employed, through its purifying action on the surrounding atmosphere, and possibly also by its invigorating effect upon the patient. Vaporisation of *dry air*, to which I shall again allude, is that method which proves so strikingly useful, and offers the greater advantage over steam, in acute cases, where the system is also undergoing other treatment.

Secondly, our subject leads us to inquire what affections of the respiratory organs have been found to be benefited by these auxiliary modes of treatment. Amongst the more acute may be named bronchitis, pneumonia, laryngitis, and croup; of chronic cases, phthisis in its various stages, chronic bronchitis, and pneumonia, and circumscribed gangrene of the lung; whilst of a somewhat mixed variety are to be reckoned whooping-cough, asthma, influenza, hay fever, and many throat affections, including diphtheria.

Thirdly, the point has been much argued, although it still appears to remain an open question, as to whether dry or moist vapours, medicated or otherwise, should be used, either in the usual process of inhalation or where a warm atmosphere is needed around a patient in an acute attack of illness. In speaking of *dry* medicated vapour in connexion with the former, I refer to that which results by volatilising powders or tinctures, or by burning medicinal herbs in a suitable apparatus and without the aid of steam. During a somewhat lengthened experience I have noticed the evil effects of moist vaporisation, excepting only, perhaps, in cases of laryngeal phthisis. The air-passages by this method are charged with an undue amount of aqueous vapour, which renders the mucous membrane so sodden that the calibre of the air-tubes is lessened and much urgent dyspnœa is the result. The tissues also become relaxed, the respiratory function is interfered with, and suppuration is encouraged. I am borne out in this opinion by two very able authorities among others—Mr. Hamilton of Liverpool and Dr. Coghill of Ventnor,—whose views upon the subject correspond very nearly with my own.

In croup and other acute cases, where the process of steaming is now for the most part adopted, for the purpose of warming the atmosphere, many of the drawbacks already referred to present themselves, recovery being in consequence retarded. The use of heated air, therefore, as I have already stated, is of far greater service and more to be depended upon. And here let me recommend a modification of Messrs. Allen and Son's portable hot-air bath, which has been very ably carried out under my directions. At the bottom of the dome of the apparatus a plate of talc is inserted and made completely air-tight—a hot-air chamber being thus constructed, to the entire exclusion of any products of combustion. On the front of the dome is a socket, into which a tube with a ventilator at the end fits. This inlet tube is sufficiently long to prevent any indraught of combustible material from the lamp through the perforations required for the circulation of air around the latter. The air, passing through the chamber referred to and funnel head and tubes attached, heats the atmosphere within a bed tent with dry vapour, and thus aids in relieving feverish symptoms, dyspnœa, and cough, both directly through the air-passages, and indirectly through the skin. The dry or Turkish bath has for years been recommended on these grounds for the relief of phthisis; cough, expectoration, and blood-spitting having been materially influenced by its use.

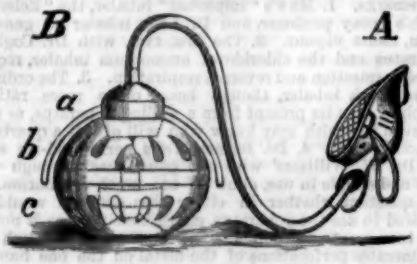
I have, next, much to say in connexion with the various inhalers which have hitherto been employed in the administration of medicated vapours. Many are based on wrong principles, none are entirely faultless, and a large number are positively useless. The majority demand forced instead of easy inspiration—a function not readily performed in health, much less in disease. The natural mode of respiration, moreover, solely through the nostrils, is perverted, and in a manner reversed; and patients are directed to go through the not very easy performance—which, happily for themselves, they are as a rule unable to attempt—of drawing the medication into the mouth by a deep inspiration, and expiring it through the nostrils! Some of these inhalers generate moist vapour, to which I have already alluded. It is scarcely possible to determine in any what quantity of the prescribed material is absorbed, either on account of its dilution or loss into the surrounding air when used with steam, or in many instances by reason of its slight volatility when used on a sponge and attempted to be snuffed or gulped into the air-passages. In certain forms the medicated vapour is merely drawn into the mouth and puffed out again, as in smoking, without a particle ever finding its way even to the larger air-tubes. It is necessary that an inhaler should be as convenient and easy in its action as it is possible to contrive it for those whose respiratory functions have been enfeebled by illness; and that dry medicated vapour of known strength should at stated intervals be taken into the system, without any effort on the patient's part whatsoever, and in accordance with the natural method of respiration. For lack of an apparatus which should more or less fulfil the above requirements, and in the absence of sufficiently distinct ideas as to the most suitable remedies to be employed, we find that treatment by inhalation has in reality not advanced at the rate it should have done; whilst in many hands it has resulted altogether in failure. Dr. Burney Yeo, who recommends the *continuous* use of a special oro-nasal respirator inhaler, says, "we must not ask more of this method, or expect better results from it than it can possibly give." Now, as this has been less than I myself consider the system perfectly capable of performing, I find one more reason for repeating that it is still very imperfectly understood.

Of the various forms of inhalers in use it is necessary to allude briefly to a few typical examples in illustration of my remarks. 1. Maw's "improved" inhaler, the "Eclectic," Siegle's spray producer, and Dr. Lee's inhaler all generate warm, moist vapour. 2. The first two, with Dr. Coghill's apparatus and the chloride of ammonium inhaler, require forced inspiration and reversed respiration. 3. The ordinary valved mask inhaler, though based on a more rational principle, is in its present form a stifling apparatus, as anyone even in health may know who will give it a quarter of an hour's trial. 4. Dr. Burney Yeo's perforated-tin mask and Dr. W. Williams' wire and gauze mask, though very light and simple in use, allow of too much ventilation. It is a question whether in either case patients would be required to use the apparatus continuously, were it not for the too great dilution of the medication through the innumerable perforations of the metal on the one hand or the gauze on the other. 5. Siegle's spray producer requires much exertion in keeping the mouth continuously open, and is really more intended for throat cases. 6. In the chloride of ammonium inhalers the vapour which is drawn into the mouth practically seldom reaches the air-passages. Lastly, in all, the quantity of the remedy absorbed is quite uncertain, either in consequence of the dilution or the feebly volatile nature of many of the drugs prescribed for use. I may perhaps just add here that Dr. Yeo, in noticing Dr. Coghill's description of his respirator inhaler, remarks that the latter "does not cover the nose, but only the mouth, which is unadvisable, as the majority of persons breathe through the nose; and indeed it is desirable that they should do so. Dr. Coghill lays great stress on inspiring through the mouth and expiring through the nose, in order to secure a complete circulation of the medicated air. But this process would prove very tiring if attempted continuously." After a variety of experiments, I am able myself to offer an inhaler to the notice of the profession, which will, I trust, be found to remedy most of the drawbacks to which I have referred in connexion with those at present in use.

Briefly, my apparatus consists of two portions, connected by a flexible piece of tubing, as shown in the accompanying figure. A is an ordinary mask, with a communicating chamber beneath, containing sponge or felt. On each side are slits, in place of valved openings, and along the crest perforations for the escape of expired air. Elastic tapes worn round the ears or neck help to keep the mask over the nose and mouth. The vaporiser, B, about five inches in width, is in three sections, the lowest of which, *c*, contains a spirit lamp. Over this is the cover, *b*, surmounted by a chamber, which is used either as a receptacle for powders or for generating hot air, and is fitted at its base with a disc of talc. The two main segments are perforated for the admission of air in connexion with the lamp, whilst two curved

air-tubes communicate with the above-mentioned chamber.[2] Tinctures, when prescribed for inhalation, will be poured over the felt at the base of the mask. These will become volatilised by the hot vapour passing from the air-chamber of the vaporiser. When powders are used they will be placed in the hot air receptacle of the latter, to be there vaporised, the fumes being inhaled with ether, chloroform, or any tincture, if so desired. This apparatus is easily handled, and can be conveniently used in any position either on the table or on the lap.

Lastly, in reference to treatment, I have already said that in *acute* pulmonary affections the diffusion of heated air around the patient was all-sufficient when other methods of cure were being at the same time adopted. Fumigation may be had recourse to if it should be considered to be of any service; but inhalation proper would, I need scarcely observe, be inadmissible from the dyspnœa already present. Among *chronic* cases, phthisis, gangrene of the lung, and chronic bronchitis and pneumonia are all, under their various conditions, benefited by antiseptics, astringents, antispasmodics, sedatives, or stimulants, of which we have a long array. In the *mixed* varieties also many of the above are found to be extremely serviceable, particularly when used in combination with a heated dry atmosphere. Our object in general is to reduce inflammatory symptoms and allay irritation of the air-passages; to destroy or arrest activity in the specific organism present, as in phthisis; to promote a healthy condition of cavities; and prevent absorption of putrid secretions which are constantly exercising their baneful influence on the blood. These several conditions are readily met by suitable remedies taken directly into the respiratory organs, as well as by constitutional treatment. Inhalants are, like remedies administered by the mouth, best used in combination, for obvious reasons.



Many patients complain of a greater difficulty in coughing up phlegm after inhaling. This may be due to their continuing a habit which has become needless, or from a preternaturally dry condition of the air-tubes during convalescence, which soon, however, passes off. Most drugs in the Pharmacopœia can, with due precautions and a suitable apparatus, be inhaled with advantage. I am myself carrying on a series of experiments with the view of determining the exact doses to be used in all cases, and the time each inhalation should last with dry medicated vapour.

In Squire's fourth edition of the Pharmacopœias of the London Hospitals, upwards of fifty combinations may be found of drugs recommended for purposes of inhalation. The majority are used with *steam*, but although the quantity to be mixed with the latter is given, it is impossible to say how much is taken into the lungs. (This last could only be done by directing that inhalation should continue for a certain length of time, with a medium strength of solution at a given temperature.) It is necessary in every case, at starting, to begin with small doses, particularly when a drug is volatilised by dry heat. Thus, for instance, a strength of seven minims of dilute hydrocyanic acid would scarcely be prescribed in the latter case, although a teaspoonful, of a drachm to an ounce in strength, to a pint of water at 80° F., is recommended in the Pharmacopœia for each inhalation—whatever this may mean. It would be a long and suffocating process, for one thing, to attempt to take into the lungs the vapour of a whole pint of water. About one-half the dose administered by the mouth is generally a fair one to start with. Dr. Wagner, of Buda-Pesth, allows his patients to inhale until a burning sensation is produced in the chest, but I think it better to watch the effects in each case at starting, and then to prescribe accordingly. It is useful for patients to inhale soon after rising, and also just before retiring to rest, as well as two or three times in the day, and at night if awake. Even with the dry process some substances take longer volatilising than others; it is needful, therefore, after prescribing a given strength of a drug, to regulate the heat of the vaporiser. Dr. Carrick Murray, of the Northern Counties Hospital for Diseases of the Chest, considers half an hour twice a day sufficient for the use of the inhaler, and also that twenty minims dropped on at once is sufficient for two days' use. How are we to reconcile this with the instructions of other authorities, say Dr. Coghill and Dr. B. Yeo—the former of whose respirator inhaler Dr. Murray was adopting—for the continuous use of their apparatus?

It would be impossible to enter into details here regarding every remedy found to be useful in pulmonary diseases; let it suffice therefore, in conclusion, to name merely a few. Carbolic acid, creasote, terebene, eucalyptus, thymol, pine oil, as well as iodine and iodoform, are amongst those most frequently used, either in combination with each other, or with antispasmodics, sedatives, &c. In Germany rabbits inoculated with tubercular matter were considered to have been kept free from tuberculosis by breathing an atmosphere saturated in benzoic acid. According to Dr. Cottereaux of Paris, chlorine gas is a specific for every form of phthisis. There are many cases in which sulphur medication has proved of great value, those engaged in the manufacture of sulphuric acid being also stated to be protected against phthisis. Dr. Jaccoud of Paris believes much in the curative effects of the pure creasote of the beech, and gives details of cases. Terebene and carbolic acid are also advantageously employed by the mouth to check intestinal infection from the sputa swallowed so frequently by patients, the lymph follicles of the intestines being so very prone to tubercular infection. Lastly, iodine proves most useful in the second stage of phthisis, and, with carbolic acid, in the purulent expectoration accompanying pneumonia; it has also a soothing effect when combined with ether.

[2] Further details will be provided later on by the manufacturers.

CASE OF THORACIC ANEURYSM RELIEVED WITHOUT OPERATION.

BY EVERARD HOME SAUNDERS, M.R.C.S., &c.,
SURGEON, ROYAL NAVY.

CASES of thoracic aneurysm so seldom being relieved by constitutional treatment or operative interference, the following, under observation here since January, 1885, which by the kind permission of Fleet-Surgeon D. O'Connor, M.D., R.N., I am able to forward, will doubtless prove of interest to the profession and worthy of record.

William F——, aged fifty-three; a naval pensioner, twenty-four years' service, the larger part of which was passed on foreign service; a widower; fair complexion, healthy appearance, of abstemious habits; good family history; has always enjoyed good health; no history of syphilis, gout, or rheumatism. Three years ago the man received the following injuries by a cart on which he was standing overturning, throwing its contents (a ton of copper sheeting) on him, and severely contusing the left hip, right shoulder, and chest, and fracturing the left tibia and fibula at the lower third. In January, 1885, he first commenced to complain of pain affecting the right lung at its apex, together with slight cough and bronchitic expectoration. These symptoms soon subsided, and he returned to duty, that of a labourer. In the following May he presented himself, suffering from laryngeal cough, giddiness in the head, and pain of a gnawing character through the right chest to the scapula, over the right shoulder-joint, and extending up the side of the neck, face, and right temple. He was unable to lie down or sleep on account of the pain, together with a feeling of impending suffocation, nor was he able to undergo the slightest exertion without discomfort. There was no complaint of dysphagia, no numbness or tingling sensations in the limb, no swelling or œdema of the right arm. He had never spat blood.

On examination there was found undue prominence over the right sterno-clavicular articulation; also dulness on percussion extending from the clavicle downwards to the upper border of the third rib, laterally from the left border of the sternum for a distance of two and a half inches

towards the right shoulder-joint; visible pulsation in the right subclavicular region, and a pulsating tumour of a rounded form situated behind the right sterno-clavicular articulation. The right pupil more dilated than the left; the right radial pulse less marked and feebler than that of the left side. There existed a patch of cutaneous congestion over the most prominent part of the tumour. No bruit; heart-sounds normal; no distension of superficial veins.

The symptoms becoming aggravated, the patient unable to assume the recumbent posture, pain increasing in severity, and not being able to obtain sleep, he was sent to the Royal Albert Hospital, and admitted under the care of Mr. Leah. Rest in bed, starvation diet, or, in more pleasing words, a modified Valsalva's treatment, subcutaneous injections of morphia to relieve the agonising pain and procure sleep, and the internal administration of the iodide of potassium up to fifteen grains three times a day, formed the treatment. As the patient was unwilling to undergo an operation (which was merely suggested to him), and his bed was required, he was discharged on June 30th, 1883. Although no appreciable alteration took place as regards the tumour and the symptoms whilst an inmate of the above institution, he from the time of his discharge steadily improved. The treatment with the iodide has been continued. There appears to be no doubt as to the present condition of the tumour, which is decreasing in size, and presumably undergoing spontaneous cure.

On reference to several works on the subject of aneurysm, I find but few recorded cases where such marked benefit has taken place in so brief an interval under constitutional treatment—viz, those of Bouilland, Tuke, Andral, Nélaton, and a more recent one recorded by Dr. Roberts of Manchester. Whether the commencing lamination (primary) took place during the patient's sojourn in hospital, whether entirely or in part due to the restricted regimen, to the iodide of potassium (which, I believe, is now credited with the power of increasing the coagulating powers of the blood), or to all these circumstances combined, it would be hard to form an exact opinion; but the case teaches us that in favourable subjects we may expect now and again to derive marked benefit, if not permanent cure, without operative interference, which is only done in desperate cases as the last resort, and almost invariably proves fatal.

H.M. Dockyard, Devonport.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. THOMAS'S HOSPITAL.

PERINEPHRITIC ABSCESS DUE TO RENAL CALCULUS; NEPHROLITHOTOMY; CURE.

(Under the care of Dr. STONE and Mr. JOHN CROFT.)

THE following case is well worthy of record. For years a patient who had been suffering from the symptoms of renal calculus, but without hæmaturia, had refused operation, only giving her consent after the evacuation of a large perinephritic abscess. How long the calculus had been forming it is not possible to say, but the evidence of its presence extended over a period of several years, during which she had frequently been incapacitated from the active duties of life and subjected to much pain and impaired health. It is somewhat strange that there had not been greater change in the structure of the kidney as the result of inflammation, but recovery with a useful kidney appears to have been complete.

E. G——, aged thirty-eight, married, was admitted into Christian ward, under the care of Dr. Stone, on Sept. 18th, 1885, and left Feb. 16th, 1886. Family history: Parents dead, causes of death unknown. A brother is said to suffer from stone in the bladder; a sister complains of pain in the region of the bladder, and a son of the patient is said to be "disposed to stone," being troubled to pass his urine. The patient has had trouble ever since she was a child in passing urine, with pain in the loins; but the symptoms did not thoroughly manifest themselves until 1871, when she came under the care of Dr. Stone, and was afterwards twice admitted into the hospital with the same symptoms, but refused operation. Her present trouble commenced at Christmas, 1884, when she had a slight miscarriage, a feeling of something in the bladder when walking, pain in the region of the right kidney, with pain and difficulty in passing her urine, which has been thick and very high coloured. No history of hæmaturia.

On admission she was a fairly well nourished, rather sallow woman, complaining, in a peevish tone of voice, of pain in the abdomen. This pain begins in the right lumbar region and passes through the groin to the right labium; it also passes down the front of the right leg as far as half-way down the shin. There is always some pain present, but she is liable to exacerbations of a cutting character. The right lumbar region is fuller than the left, and a soft round swelling in the region of the kidney can be indistinctly felt; in this position and in the right hypochondrium there is great tenderness. The rest of the abdomen appears normal. No enlargement of liver or spleen. Heart and lungs normal; pulse 80; tongue clean; appetite fair; bowels regular; skin normal. Temperature 99°. Urine acid; only a small trace of albumen; under the microscope there is a large quantity of pus cells, but no blood; deposit of urates and phosphates; sp. gr. 1030.

Sept. 21st.—Feels better for the rest, but does not sleep well. Complains of nausea, and is thirsty. Passes urine about three times in the day; complains of scalding; there is some difficulty in micturition, but when it has once commenced there is no further difficulty. Evening temperature has varied from 99·2° to 100·4°.

On the 26th the swelling in the abdomen had extended to the umbilicus; the abdominal muscles were very tense. She had a sharp attack of pain on the 23rd, and on the 24th there was no evidence of any pus in the urine. From this time until Nov. 4th there was no improvement, the temperature was usually normal in the morning, and two or three degrees higher in the evening. Her tongue became red and sore, the appetite failed, and there were slight attacks of looseness of the bowels. Several times there were attacks of pain in the right groin, and it was noticed that the swelling continued to increase until the above date, when fluctuation was found above the crest of the ilium, about two inches behind the anterior superior spine. The patient was placed under chloroform, and Mr. Battle opened the abscess at the point at which it was presenting. A large quantity of thick creamy pus escaped from the incision, and the finger when passed into the abscess cavity could be moved freely in all directions without touching the wall of the cavity, excepting on its outer aspect. Its full extent upwards could not be ascertained; downwards it extended to Poupart's ligament, and inwards to the mesial line. Antiseptic dressings were applied after syringing the cavity and the insertion of a drainage-tube. The bladder was also carefully explored with a sound, but no evidence of disease discovered. After this, until the 12th, the temperature was normal. An attempt was made on that day to reach the calculus by means of long probes and catheters, but the position of the opening and its distance rendered the attempt unsuccessful. In the evening the temperature rose to 100°. The discharge continued free, though lessening in quantity, and the temperature normal, but there was little improvement in the general symptoms, and she was losing flesh.

On Nov. 21st Mr. Croft operated. The patient having been placed under ether, the opening was enlarged upwards and the sinus examined. It extended downwards towards Poupart's ligament, and upwards towards the kidney; the muscles and fasciæ over it, which were much matted, were incised upwards, and another incision made at right angles to this. When the kidney had been bared fluctuation was felt in it, and the insertion of an exploratory needle gave exit to some thick pus. A longitudinal incision was made down to the pelvis of the kidney, in which a calculus of somewhat dumb-bell shape was found and extracted in two pieces. The wound was then thoroughly syringed with chloride of zinc, the kidney packed with iodoform gauze, and a large drainage-tube passed to the bottom of the sinus. Silk sutures were inserted, and iodoform, salicylic wool, and a pinewood-wool bag applied. This dressing was to be

changed every four hours. After the operation the temperature was 95°, gradually rising to normal at the end of twelve hours, when the pulse was 100, weak, and compressible. Vomiting lasted until the next day. She slept after the administration of morphia. Nutrient enemata were given every two hours until 2 P.M. of the day following, and then every four hours.

Nov. 24th: The urine was very smoky, and the temperature subnormal, so the dressing was changed to chlorinated soda lotion. From this date there is little to record, beyond occasional slight attacks of pain in the wound and gradual diminution in quantity of discharge. The temperature rose to 101° on the day after the operation, but became normal next day, and remained so throughout with one or two unimportant exceptions. The albumen (which had never exceeded one-tenth in amount) and the pus disappeared from the urine. Her general condition rapidly improved, and when she left the hospital she was better in health than she could remember to have been before. The calculus consisted of two parts—the larger, oval in shape, measuring one inch by two-thirds of an inch, joined by a narrow neck three-fourths of an inch long to a smaller part, also of somewhat oval shape, and measuring three-fifths by one-third of an inch; when dried it weighed about fifteen grains and a half. On section it was found laminated without evident nucleus. Chemical analysis showed the central portion to consist mainly of uric acid, with oxalate and phosphate of lime. The outer part was composed to the extent of nearly one-half of phosphate and oxalate.

NOTTINGHAM GENERAL HOSPITAL.

PUNCTURED WOUND OF BUTTOCK, FOLLOWED BY TRAUMATIC ANEURYSM; OPERATION; CURE.

(Under the care of Mr. JOSEPH LITTLEWOOD.)

G. H——, aged fifteen, was admitted on the afternoon of May 8th, 1885, with a punctured wound in the left buttock, which was thus inflicted: He was seated on a form at school with some other boys. The one on his left hand was engaged in sharpening a pencil with a pocket-knife, and he was "playing" with the one on his right, who took up a ruler to strike him. To avoid the blow, he made a sudden movement towards the left, and received the blade of the knife in his buttock. The blade measured two inches and a half long. He was said to have lost a great quantity of blood at the time, which was stopped by a pad of lint and perchloride of iron, and he was then brought to the hospital.

On admission, a small incised wound barely half an inch long was found, its long axis lying across the position of Nélaton's line, posterior to the great trochanter. Another measurement was taken in order to determine its position with respect to other anatomical landmarks. Thus, a line drawn vertically downwards from the anterior superior spine of the ilium, with the limb in a straight line with the body, met one drawn horizontally round the outside of the buttock from the wound, exactly three inches below the anterior superior spine; and the length of the horizontal one between its point of junction with the vertical one and the wound was five inches and a half. The boy had not suffered much from the loss of blood, and the hæmorrhage had absolutely ceased, not a drop of blood now issuing from the wound. A pad and bandage were applied.

May 9th.—He complained of a good deal of tensive pain, so the wound was dressed. There was some hardness and swelling in the situation of it, which was quite dry and almost healed. A piece of dry lint kept on by strapping was applied.

11th.—The wound was completely healed; the swelling was larger and harder, and much ecchymosis had appeared over it.

12th.—Pulsation was noticed in the swelling for the first time.

13th.—There was now a large, hard, ill-defined swelling, the size of a cocoanut, occupying as nearly as possible the centre of the left buttock. It pulsated distinctly with an expansile beat, and on auscultation a bruit could be clearly heard. Most of the pulsation and by far the most marked area of it lay above—i.e., nearer the crest of the ilium than the wound. Much discolouration of the skin was now apparent, and it was curious that it hardly extended at all towards the thigh, but seemed to have spread almost entirely in an upward direction.

14th.—The size of the swelling, its pulsation, and bruit had all increased, and an operation was decided on.

15th.—Chloroform having been administered, Mr. Littlewood proceeded to perform the operation of laying open the aneurysmal sac and tying both ends of the artery in the wound. A short incision was made through the skin and fat over the most prominent part of the tumour down to the gluteus maximus, which on being reached was seen to pulsate and bulge through the edges of the wound. An incision large enough to admit three fingers was then made through the muscle, which was followed at once by a rush of arterial blood. With the fingers in the wound, which somewhat checked the flow of blood, an endeavour was made to find and compress the proximal end of the artery so as to arrest the hæmorrhage before completely laying open the sac. This, however, could not be done. The wound was then rapidly enlarged in an upward and downward direction to the extent of six inches, and the contents of the sac turned out. Rapidly as this was done, the quantity of blood lost was excessive and the patient became faint. An abdominal tourniquet was then applied, which completely arrested the bleeding. The distal end of the vessel was found without difficulty and ligatured, but the proximal end was only discovered after a long search. It was lying just within the great sciatic notch, and after some difficulty was tied. There was a considerable separation between the divided ends of the artery. After both ends had been secured (catgut ligature being used) and portions of loose coagula removed, the wound was closed with wire sutures and a drainage-tube put in. The operation was performed under the spray and carbolic gauze dressings used.

16th.—Had rallied fairly from the shock, and was taking fluid food well. Wound dressed; distended with blood-clot. No sign of hæmorrhage. Some of the sutures were removed.

17th.—Wound dressed again. There was a quantity of dark-brown-coloured discharge and small lumps of breaking-down blood-clot issuing from it. The remainder of the sutures were taken out and the wound thoroughly syringed with a 1 in 40 solution of carbolic acid. The temperature this morning was 102·8°. He complained of no pain; he was delirious during the night, but took fluid food well.

18th.—The wound was gaping widely, and had a by no means healthy appearance; still much dark-brownish clot in it, with an offensive discharge. Syringed out as before, and iodoform sprinkled into the bottom of the wound. Carbolised gauze dressing and spray continued.

The wound gradually discharged the remnants of clot, and began to granulate feebly. The spray and gauze dressing were discontinued, as they did not appear to promote its healing. Various dressings were used, as sulphate of zinc lotion, dry boracic lint, and perchloride of mercury wool. A generous diet with wine was given, but the progress in the direction of healing was of the slowest kind, and when he left the hospital in the middle of July a wound of considerable size still remained. There being scarcely any improvement during the last five weeks, and his parents being well to do, Mr. Littlewood felt no hesitation in sending him to his home, which was a few miles out of Nottingham, and when he saw him the first time afterwards a marked change had taken place, the wound being more healthy in appearance, and the large gap in the gluteus muscle, which had shown no signs of healing in the hospital, was rapidly filling up. He was seen six or seven times, and each time the improvement was marked and his general health improved—so much so that he was quite well at the beginning of September, with the exception of some stiffening about the hip; this, however, had quite gone when he called at the hospital a short time ago.

ROYAL HOSPITAL FOR DISEASES OF THE CHEST, CITY-ROAD.—On the 15th inst. a new wing to this institution was opened by H.R.H. Princess Beatrice, with great ceremony, and in the presence of a large number of the friends of the hospital. The annual meeting was subsequently held, when the report for 1885 was submitted. It showed that 7567 out-patients had been treated, and that the year's subscriptions had amounted to £5026. The four wards in the new wing are to be named as follows: the Victoria, the Princess Beatrice, the Princess of Wales, and the Shaftesbury. The hospital was founded by the Duke of Kent in 1814.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuberculosis of the Skin.—Paracentesis for Bronchiectasis.

AN ordinary meeting of this Society was held on Tuesday last, Mr. G. D. Pollock, F.R.C.S., President, in the chair. A very good discussion took place on the second paper, the meeting being prolonged till 10.40 P.M.

Dr. HEBB contributed a paper on a case of Tuberculosis of the Skin, which was communicated by Mr. G. Cowell. A strumous boy, under treatment in Westminster Hospital with supposed Barbadoes leg, was seen by many visitors to the International Medical Congress, and no exception was taken to the diagnosis. The boy had never been beyond the environs of London. He died two years later (aged eighteen) of a bronchial affection, and a portion of the thickened skin was secured for microscopical examination, with the following result:—General hypertrophy of skin; dermis thickened from overgrowth of its connective tissue and the presence of collections of lymphoid cells; in many places there are aggregations of both large and small lymphoid cells, and among them numerous giant-cells, the spheroidal masses thus formed being practically indistinguishable from tubercles such as are found in the liver and kidney; in the lymphatics a red staining shows the presence of small bacilli in great numbers, colonies being also found around the aggregations of lymphoid cells. The case is compared with one reported by the late Dr. Tilbury Fox, where the appearances and history were similar, but the microscopical specimens showed no trace of tubercle.—Dr. RADCLIFFE CROCKER said the question was whether this was a unique case or not. Lupus, scrofuloderma, and true tubercular ulceration were three conditions with which the case described might be compared. With the last mentioned it had no resemblance. But it was known that lupus of the legs did lead to elephantiasis of the limb affected; the elephantoid condition was probably the pathological result of obstruction of the lymphatics. Kaposi alluded to cases of elephantiasis following lupus in which the secondary changes masked the lupoid characters; the present case might have been an illustration.—Dr. THIN related the case of a lady suffering from a peculiar limited swelling of the back of the hand that looked something like Barbadoes leg; it was certainly not elephantiasis, and was limited to the carpus and knuckles. He thought it might have been similar to that described by Dr. Hebb. The "anatomical" tubercle resulting from post-mortem wounds had been shown by investigators in Paris and Berlin to be sometimes associated with the growth of tubercle bacilli. He was also struck with the remarkable fact that conditions clinically widely different from one another should be due to one and the same cause. The different clinical pictures caused by trichophyton tonsurans bore some analogy to this.—Dr. HEBB replied that, although many observers saw the case, no one suggested lupus as the nature of the disease; and Kaposi asserted that there was no difference between lupus of the leg and face.

Dr. THEODORE WILLIAMS and Mr. RICKMAN J. GODLEE communicated a conjoint paper on two cases of Bronchiectasis treated by Paracentesis, with remarks on the mode of operation. The first case was that of a gentleman aged sixty-seven, who had suffered for two years from chronic bronchitis and emphysema, and six months later had dry pleurisy of the left lung. After the pleurisy the expectoration, before moderate, became profuse and somewhat fetid, the cough more and more harassing, and although Malvern and Bournemouth were visited and a great variety of antiseptic treatment was tried, he obtained no relief. On Feb. 3rd he was seen by Dr. Williams, who noted the existence of a bronchiectasis in the lower lobe of the left lung, the pleura of which was adherent. Tubular sounds were heard over two small areas, neither exceeding a half-crown in circumference, in the eighth interspace. At the request of Dr. Williams, a puncture was made by Mr. Godlee into the first area with an aspirating trocar and cannula. Under antiseptic precautions the cavity was opened and a drainage-tube inserted. The result of the operation was that the cough nearly ceased, the expectoration, which was for a few days pneumonic, diminished from one pint a day to a few pellets and became free from odour, and the patient gained flesh rapidly. At the end of six weeks the discharge ceased, the channel closed, and the wound healed up. Examination of the chest showed complete disappearance of tubular sound from the second area as well as from the first, and further shrinking of the chest wall. The patient at the close of nine months after the operation remained free from cough and expectoration, and was able to walk four miles at a stretch. The second case was that of a girl aged twenty-one, who, ever since an attack of typhoid fever, had had troublesome cough and copious expectoration, gradually increasing in quantity and becoming more and more fetid. She had had hæmoptysis three times; on one occasion amounting to a pint. Examination of the chest showed several bronchiectases, two of which gave rise to very coarse râles over areas about the size of a half-crown in the sixth and seventh interspaces in the axilla; a third area was detected in the eighth space below the scapular angle. At first the patient improved under antiseptic treatment, the expectoration diminishing and becoming less fetid, but after a while these measures ceased to give relief, and an operation was decided on. On June 29th, at Dr. Williams' request, Mr. Godlee passed a small exploratory trocar successively into each of the three marked spots and, obtaining no result, inserted a large-sized aspirating trocar and cannula into the seat of the first puncture in the sixth interspace. But an attempt to cut down on the cavity failed. A second operation was performed on July 16th, and after some exploratory punctures Mr. Godlee, with antiseptic precautions, cut down on and laid bare the eighth rib, and excised about an inch of it in order to approach nearer to the bronchi before attempting to open them. The trocar and cannula were then passed to a depth of five inches, and Mr. Godlee cut down along the cannula and inserted a drainage-tube. The wound gradually healed up and the patient left the hospital at the beginning of September considerably improved, the cough slight, the sputum having diminished to about three ounces a day, and being only occasionally fetid. The presence of bronchiectases in other parts of the left lung, and possibly also in the right lung, precluded such complete success as was obtained in the first case. A short account was then given of four other cases of bronchiectasis treated by tapping, in all of which the position of the cavities had been recognised and successfully punctured, but owing to the presence of other bronchial dilatations the success was only partial in these cases. The arguments in favour of the operation are: 1. The tendency to death by septicæmia in some form, unless proper drainage is effected. 2. The reduction in the amount of expectoration, this being due, not only to the removal of the matter, but to the disappearance of the effects of its irritation on the healthy bronchi. 3. The invulnerability of the lung tissue, it being proved that punctures of this tissue give rise to little or no disturbance to the part or to the system generally. The difficulties of the operation are principally those of diagnosis of the exact positions of the bronchiectases: (1) from the presence of emphysema; (2) from the reverberatory character of their auscultatory sounds, which renders exact localisation very difficult. Paracentesis of bronchiectases seems to be indicated under the following circumstances: 1. In cases where antiseptic treatment of all kinds has failed to correct the fetor of expectoration, and to allay the harassing nature of the cough, where death by septic pneumonia seems imminent. 2. Where the evidence goes to prove that the bronchiectases are confined to one lung, are situated in the lower lobe, and have overlying them an adherent pleura. It is not indicated where multiple bronchiectases exist in both lungs, where they are surrounded by emphysema, and where the pleura is non-adherent.—Dr. GOODHART showed two recent specimens of bronchiectasis, which he considered lent force to the remarks in the paper on the difficulty of diagnosis. One of the specimens came from a boy aged twelve, at the base of whose right lung physical signs of pleuritic effusion were detected during life, but nothing was done owing to the signs of cerebral mischief. At the necropsy a cerebral abscess was discovered, and a pea was found in the bronchus of the diseased lung, which was in a state of consolidation, but riddled through with abscesses. The other specimen came from a woman who had all the signs of an acute pneumonia. At the right apex there were signs of consolidation; at the angle of the left scapula were sharp râles and harsh inspiratory murmur, which was regarded as probably indicative of pneumonia. At the necropsy pneumonia of the right upper lobe was found,

but in the left lower lobe a sacculated condition of the bronchial tubes was discovered. The symptoms and signs were of equivocal character in many cases of bronchiectasis. He had seen four or five of such cases in the course of the past ten years. He agreed that the presence of emphysema was a bar to the operation, for it masked the condition of things altogether. To diagnose adhesion of the pleura was almost impossible. The best cases for operation were those of bronchiectasis associated with chronic pneumonia or fibrosis of the lung. Many cases of bronchiectasis were never associated with fetor from first to last. Fetor was, in his opinion, always a question of some disintegration of the lung.—Dr. PERCY KIDD said that in the second case related in the paper the hæmoptysis was very alarming, and did not cease until the tube had been taken out. In some cases of bronchiectasis the development of fetor was associated with the onset of the signs of pleurisy; this might be explained in various ways; one explanation was the spread by contiguity of inflammation. In a case that had been under his care the illness began with "congestion of lung" eighteen months before; chronic bronchitis had existed ever since, but at the angle of the right scapula there were marked signs of a cavity; later on septic infection appeared, and was complicated with phlegmonous erysipelas. At the necropsy the case was seen to have been one of chronic pneumonia with cavities—none, however, larger than a blackbird's egg. Operation in this case was proposed but not carried out, and it could not have been of much good. Referring to the difficulties of diagnosis of bronchiectasis, he mentioned a case in which the bronchial dilatations were supposed to exist on one side, and post-mortem examination showed that the other side was also affected, though it had yielded no corresponding physical signs. The diagnosis of adhesions of the pleura was also exceedingly difficult, and he had found adhesions to be absent even where there was retraction of the parietes. He had seen three fatal cases of abscess of the brain resulting from suppuration in the lung. As to the diagnostic importance of membranous shreds in the expectoration, he could not bear out Dr. Williams' experience. Operative interference would prove unsatisfactory in intense cases of bronchiectasis. In other cases, where operation seemed favourable, the patient often made a good recovery with mere antiseptic non-surgical treatment. A case of a pulmonary abscess occurring after childbirth illustrated this forcibly.—Dr. CAYLEY believed that operation was most likely to prove successful when the bronchiectasis was surrounded by solid lung, and the pleura was then most probably adherent. Operation, in his opinion, was dangerous when bronchial dilatation was not so associated. The mode of death by abscess of the brain was very frequent in these cases; the abscess was solitary and chronic, and therefore peculiar. Next to ear disease, suppuration in the lung was by far the most frequent cause of cerebral abscess.—Dr. C. Y. BISS considered that suppuration in the lung should be treated in the same way as purulent collections elsewhere in the body. Speaking of the danger of septicæmia, which was real, he showed how in cases of bronchiectasis, by virtue of the tubes being constantly bathed with offensive material, there was a degree of immunity from septicæmia. Brain abscess might occur without operation in these cases. From his experience he would say that the danger from hæmorrhage could not be great, for the hæmorrhage had been small in all the cases he had seen. It had been said that the cut ends of ribs afforded an ingress for septic matter; there was no ground for that assertion, for the removal of portions of ribs in empyemata was now of very frequent occurrence, and yet septic infection was rare in such cases. He thought that inversion to get rid of an excessive amount of secretion threatening suffocation was a valuable mode of treatment if the emergency arose. The liability to recurrence of bronchiectatic cavities should be borne in mind when conferring with patients about operation.—Dr. T. BARLOW spoke of the extreme difficulty of diagnosis in some cases of bronchiectasis. He referred to a case which was almost a reproduction of one of the specimens shown by Dr. Goodhart. There had been impaction of a pea in one bronchus; the lung was riddled with cavities. During life there was almost no breath sound and very considerable dulness. In some cases of aneurysm, too, he had observed the same physical signs, and post-mortem examination had revealed bronchial dilatations.—Dr. COUPLAND also spoke of the difficulty of diagnosing bronchiectasis, and mentioned two cases in which pleural effusion was diagnosed, but bronchiectasis was found after death. The expectoration of a piece of bone in another case showed that what had been diagnosed as pleural effusion was really a solid lung in which a cavity had formed below the obstruction of a bronchus by the bone; this patient recovered without operation. Suppuration and gangrene of the lung might be induced by a suppurating bronchial gland, which opened, on the one hand, into a bronchus, and, on the other, into the œsophagus. Particles of food passing from the food-passage into the lung was no doubt the cause of the gangrene.—Mr. A. PEARCE GOULD said the conclusions of Mr. Godlee would secure the support of all surgeons. If physicians were unable to diagnose with certainty, there was also a corresponding difficulty for the surgeon. It was exceedingly difficult to estimate the distance from the surface of any cavity; the conductivity of sound between the cavity and the site selected for puncture must vary considerably with the nature of the interposed tissue. He recommended Dieulafoy's aspirator as an exploring instrument, the surgeon making a vacuum as soon as the needle has passed through the parietes. He could not agree with Dr. Biss that there was no danger of hæmorrhage.—Dr. BISS explained that, considering the theoretical danger of hæmorrhage, he had been surprised that hæmorrhage had been so slight; he did not assert that there was no danger.—Sir ANDREW CLARK congratulated the authors on their success in the first case especially, which had been under his own treatment a good many years ago. The patient was a dyspeptic, who developed general bronchitis about three or four years since, supervening on which there came a dry pleurisy of the left side, which persisted, but was unaccompanied by effusion; the base of the left lung became consolidated; the bronchiectatic condition of the right lung remained. The patient became subject to convulsive paroxysms of cough, during which he expectorated large quantities of mucopurulent material. For a time he got neither better nor worse, and then was lost sight of. He was glad that Dr. Williams had in the paper given the further course of the case. As to the value of surgical treatment of cases of bronchiectasis, he considered that the cases of operation were not sufficiently numerous to afford a definite judgment, but there could be no question that operation often affords great relief, and sometimes even a possibility of complete cure. With regard to the difficulty of making a diagnosis of adhesions, he was of opinion that the presence of dulness, diminished vocal fremitus, diminished vocal sounds, and resonance were almost certain evidence that adhesion had taken place. As to the diagnosis of bronchiectasis, he thought the difficulties were not so great as had been made to appear. If there were abundant expectoration with severe fever, with the presence of cords or leashes of elastic tissue in the sputa, and the absence of areolar elastic tissue, he would have no doubt that he was dealing with a case of bronchial dilatation. With regard to hæmorrhage, the fact that in fibroid tissue the arteries participated in the sclerosis, diminishing their calibre, was sufficient explanation of the slight tendency to hæmorrhage. Speaking of the scientific side of the paper, he remarked on the absence of tubercle bacilli in the cases narrated, and said that if all consolidations were characterised alike as of tubercular origin, it was a very odd sort of phthisis which could be cured by a simple operation like that to which the authors had drawn attention in the first case. The author's observations on the absence of bacilli in some cases of fibroid phthisis confirmed his own.—Dr. C. T. WILLIAMS, in reply, did not consider that operative treatment should be confined to cases associated with fibrosis and adherent pleura; there were mixed cases, and he would be sorry to shut out all other cases. As to the diagnosis of bronchiectasis, no doubt there was much uncertainty with total obstruction of a large bronchus, but he agreed with Sir Andrew Clark that there was some, but not always unsurmountable, difficulty in diagnosis. In his paper he had laid great stress on the presence of membranous shreds as of diagnostic value. Whether these were due to exudation or not he could not say, but as he believed they were not found in any other cases he regarded them as of much importance.—Mr. R. J. GODLEE, in reply, alluded to the question of hæmorrhage; in the neighbourhood of large bronchi he considered that hæmorrhage might be a very serious danger. In some cases of paracentesis in which the patient's mouth became full of blood he thought that a bronchial vessel must have been opened, and if such a patient were deeply anæsthetised the danger from suffocation would be very serious. In his experience of cases of pulmonary surgery he had always found

plugging sufficient to arrest any hæmorrhage. On the diagnosis of adhesions all he would say was that often when operating he had detected no adhesions, even after the asseveration to the contrary of some of the Brompton physicians. When soft adhesions were present the lung was easily pushed away from the parietes, and puncture was therefore difficult. In a case of what was regarded as loculated pleuritic effusion, it turned out, on operating, that but a few weak adhesions were present, and these being unavoidably broken down some fluid escaped into the general pleural cavity, with the development of septic pleurisy. The aspirator was certainly the best instrument to use in exploration; during the withdrawal of the cannula it was possible to ascertain whether a cavity had been traversed. In his paper he had referred only to cavities the result of bronchiectasis.

MEDICAL SOCIETY OF LONDON.

Amputation of Penis.—Alveolar Abscess with Thrombosis of Cavernous Sinus.

AN ordinary meeting of this Society was held on Monday last, Mr. R. Brudenell Carter, F.R.C.S., President, in the chair. An important ethico-physiological question arose in the discussion of the first paper.

Mr. F. BOWREMAN JESSETT read a paper on Amputation of the Penis by Pearce Gould's method, which will appear in full in an early number of THE LANCET.—The PRESIDENT considered that for certain individuals in the active sexual period it was proper to remove the testes in order to prevent the occurrence of repeated discomfort and chagrin from inability to satisfy the physiological desires.—Mr. PEARCE GOULD related another case of amputation of the penis by his own method, which occurred in his practice about two years ago. The patient was a man aged fifty-four, in whom the inguinal glands were involved; in the operation he removed also these affected glands. An ordinary glass syringe was a very convenient instrument to permit of micturition in the standing posture. He was not convinced of the necessity of removing the testicles in such cases, for in his opinion a chaste life was consistent with perfect health.—Mr. J. H. MORGAN spoke of the question of heredity in cancer, which varied according to the tissue in which the new growth occurred. He thought removal of the testes inexpedient, unless there were signs of disease of one or both organs, for mere castration caused considerable temporary depression in parts controlled by the sympathetic system.—Mr. W. PYE considered that mere castration was not an operation dangerous in itself. A perfectly chaste life was, he held, possible without deterioration of the general health; if the testicles were removed he should expect rather that important changes would occur in the body at large.—Mr. DAVIES-COLLEY referred to two cases of cancer of the body of the penis on which he had operated; he removed the organ at the root, and then opened the urethra in the perineum. This method was advocated by Thiersch in 1871, but Professor Humphry of Cambridge had performed a similar operation many years before this. He did not think that removal of the testes was called for.—Dr. W. M. ORD asked whether any trustworthy information existed as to the fatality of the operation that produced eunuchs in the East.—The PRESIDENT said that the operation was done at a very early age in the East, the patients being buried in sand to check the hæmorrhage and heal the wound; there was a certain percentage of deaths.

Mr. PEARCE GOULD read notes of a case of Alveolar Abscess causing death from thrombosis of the cavernous sinus. A widow, aged fifty-seven, was admitted into the Temperance Hospital with the mouth and teeth in a foul state; a sloughy opening was seen in the centre of the right cheek. An incision was made into the tissues over the jaw from the outside, where fluctuation was detected over the lower part of the masseter; the swelling of the face subsided a little after this, but the patient's general condition was very unsatisfactory. Six molar teeth were extracted on the right side on Feb. 22nd. A probe passed into the external wound detected bare bone; the trismus lessened, but there still remained continued fever and the mouth was very foul-smelling. Some œdema of the right temple had also appeared. Four days after the removal of the teeth, an abscess above the external angular process of the orbit and another in the posterior triangle of the neck were observed, but the external jugular was not thrombosed. The general state did not improve; the pulse was 126, small, and weak; the temperature 103·8°; respiration stertorous, and crops of herpes about the lips. The patient was very drowsy; there was great œdema of the orbit and chemosis, with some proptosis of the right eye and less of the left; the eyeball could be moved a little from side to side. The patient had some rigors on March 1st. The general asthenia increased, and on March 2nd the conjunctivæ were yellow and motions colourless. Death occurred in a state of coma. At the necropsy several globular abscesses were found in the lungs with very dense walls, and no signs of adjacent inflammation. The liver was fatty and enlarged; the kidneys healthy. There was necrosis of the outer part of the right side of the lower jaw; the temporal muscle was discoloured, but not actually purulent. Some lymph was detected along the basilar process of the occipital bone and sella turcica. The blood was more fluid than usual. The right cavernous sinus was greatly distended, and contained greyish-yellow broken-down pus and clots; the right ophthalmic vein was similarly affected, and the circular sinus with the superior petrosal on the right side. The inferior petrosal and lateral sinuses were healthy. The left cavernous sinus contained a clot, of which the inner part was yellow. The case appeared to be an example of a rare condition. The thrombosis had probably spread through the pterygoid veins on the right side to the cavernous sinus, and thence to the left side by the circular sinus. Sir William Bowman's case was mentioned in which there was pulsation in the orbit, which led to ligature of the common carotid on the idea of aneurysm.—Mr. B. CARTER referred to two cases of orbital cellulitis in which there was proptosis; both recovered.—Dr. SIDNEY COUPLAND had met with thrombosis of the cavernous sinus after death, when it had never been expected during life. In Mr. Gould's case we had a parallel to thrombosis of the lateral sinus occurring after ear disease. He related a case of basic meningitis in which there was total ophthalmoplegia and loss of sensation in the ocular tissues; at the necropsy there was ancient plugging of both cavernous sinuses. During life there were no signs of papillitis; there was no "choked disc," showing that V. Graefe's explanation was incorrect, as had now been generally accepted.—Mr. DAVIES-COLLEY related three cases of thrombosis of the cavernous sinus occurring in cases of malignant facial carbuncle.—Mr. ALLINGHAM, jun., spoke of the case of a girl, aged twenty-one, who died with thrombosis of the facial vein and cavernous thrombosis; there was extreme chlorosis.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

On Suction of Sewer Gases into Service-pipes conveying Drinking-water—a fertile causation of Enteric Fever.

A MEETING of this Society was held on Friday, Jan. 15th, Dr. Corfield, President, in the chair.

The objects to which the author of the above paper, Dr. HORACE SWETE, alluded, was to show an insidious danger that existed where a vacuum was formed by water-pipes being suddenly turned off from the main, and the means he had devised to prevent such an occurrence. He first pointed out the danger attending the intermittent water-supply, and very often also the constant service supply, as various occasions arise for shutting off portions of the water-supply for making repairs, flushing, &c.; it is when this happens that a vacuum is formed and sewer gases admitted into the water-pipes. This was illustrated, first, in Dr. Blaxall's report to the Local Government Board of enteric fever occurring at Sherborne; secondly, in that notable case of typhoid fever at Caius College, Cambridge, where Dr. Buchanan in a most masterly way discovered the source of sewer gas in the one watercloset which was attached to the room of one of the Fellows, in which during his absence the dry weather caused the small syphon of the weeping pipe to dry up, and gases freely came from the town sewers, and were sucked into the pipes supplying the students with water. Dr. Swete then referred to his own personal knowledge, how he found coal-gas at Droitwich in the drinking-water sucked in from an adjoining gas main; and again at Kidderminster, the water-supply falling short, the main was turned off daily for several hours, the cause of the outbreak here being not in the well water, but in that which passed through the pipes, which, being constantly milky when drawn, showed that air—viz., sewer gas—had

found its way by suction into the vacuum formed by the water having been turned off. He then went on to point out the means of preventing this danger, and came to the conclusion that the only true protection would be to admit air into the highest point of house service pipes whenever the water was turned off, thus effectively to prevent suction either by syphon action or by the formation of a vacuum in the service-pipes. To effect this he constructed a dome-shaped valve, inside which a float surmounted by an elastic disc presses against a metallic diaphragm; above the diaphragm are holes to admit air, so that when the water falls the float falls with it, and air is admitted; when the water is again turned on, the float rises and seals the valve; the greater the pressure the more closely the valve is sealed. The objections that have been raised against these valves are: 1. It is a sanitary fad, and there are plenty of others in the market. There are certainly some traps, and also an automatic valve, which entirely failed at Caius College, Cambridge. 2. Why not simply bore a hole in the top of the service-pipe and so admit air. Truly, such a hole will admit air, but what a splendid fountain would be made with a head, say, of 250 feet of water! 3. What is the necessity of such valves when we have separate cisterns for the watercloseets? These often fail, as was the case in the typhoid outbreak at Kidderminster. 4. The fear that, unless care is taken to place the valve where foul air cannot touch it, it would not be of much use. To this objection the author stated that it was not intended to place the valve under any watercloset, but to keep it at the highest point outside any such place; even were it placed inside, the air could only act on a very small film of water and without any pressure; whereas in suction, air, conveying with it organic matter, passes through a considerable quantity of water in the pipes, and all organic impurity is washed from the air-bubbles into the air.

NORFOLK AND NORWICH MEDICO-CHIRURGICAL SOCIETY.

Suture of the Ulnar Nerve.—At the March meeting of the Norfolk and Norwich Medico-Chirurgical Society, Dr. MICHAEL BEVERLEY showed a patient whose ulnar nerve he had sutured in November last. H. G. ——, aged sixteen, received a severe wound above the left wrist by the bursting of a ginger-beer bottle on August 19th, 1885. When first seen by Dr. Beverley, ten weeks afterwards, the cicatrix was extremely painful, especially if the fingers were extended; there was complete loss of sensation in the little finger and half of the ring finger, both of which drooped, and wasting of the muscles on the outer side of the hand, where the skin was cold and clammy. On November 12th (twelve weeks after the injury) Dr. Beverley made an incision along the course of the ulnar nerve one inch above and below the cicatrix; it was found to be severed; the proximal end was bulbous, and attached by its sheath to the tendon of the flexor carpi ulnaris, which was itself lacerated by the original injury; hence the pain which was produced by any movement which extended this tendon, and thus stretched the sheath by which it was connected to the upper segment of the divided nerve. The distal end of the nerve was retracted and separated from the proximal by nearly half an inch. A fresh section was made through the ends of the divided nerve, and they were brought into accurate opposition by two fine chromicised catgut sutures. There was very little tension when the hand was semi-flexed, in which position it was retained by an angular metal splint. The operation was performed under carbolic spray and with strict antiseptic precautions. The wound healed by first intention. On the third day after the operation there was slight tingling in the little finger, on the sixth day slight sensation to the touch, and on the ninth day decidedly returning sensation. On the fourteenth day the hand and arm were thoroughly examined, and it was found that sensation was partially recovered in all the parts from which it had been absent before the operation. A fortnight later the splint was removed, and the patient was directed to use his hand gently; there was a very decided return of sensation, and the drooping fingers could be slightly raised. The subsequent progress of the case has been very satisfactory. He can now (March 1st) move the fingers extremely well. Sensation has completely returned, and the hand is of nearly as much use as it was before the accident. In his comments on the case, Dr. Beverley referred to instances of successful nerve-suturing recorded by Langenbeck, Esmarch, Virchow, Hulke, Heath, and Langton.

Reviews and Notices of Books.

Handbook of Geographical and Historical Pathology. By Dr. AUGUST HIRSCH. Vol. 2: Chronic, Infective, Toxic, Parasitic, Septic, and Constitutional Diseases. Translated from the Second German Edition by CHARLES CREIGHTON, M.D. London: The New Sydenham Society. 1885.

THE subjects contained in this volume of Professor Hirsch's classical treatise include many diseases of great interest from the historical and geographical standpoint. Leprosy, syphilis, goitre, puerperal fever, and scurvy are amongst the number which are subjected to the penetrating analysis of the learned author, whose researches have done so much to complete our knowledge of disease. The scope of the volume will, however, be best gathered by a summary of the chapters, as follows:—*Chronic Infective Diseases:* (1) Leprosy; (2) Syphilis; (3) Yaws, Button Scurvy, and Verruga Peruviana; (4) Endemic Goitre and Cretinism. *Toxic Diseases:* (5) Ergotism; (6) Pellagra and allied diseases; (7) Milk-sickness and the Trembles; (8) Endemic Colic. *Parasitic Diseases:* (9) Animal Parasites; (10) Parasitic Fungi. *Infective Traumatic Diseases:* (11) Erysipelas; (12) Puerperal Fever; (13) Hospital Gangrene. *Chronic Disorders of Nutrition:* (14) Chlorosis and Anæmia; (15) Scurvy; (16) Beri-beri; (17) Scrofula; (18) Diabetes; (19) Gout. Although under the term "leprosy" there has no doubt been included a great variety of skin affections, which add to the difficulties of the historian to assign a proper value to old chronicles, there appears to be sufficient evidence of its occurrence in Egypt, India, and Japan in very remote periods. Professor Hirsch thinks that the biblical term "sâraat" (Leviticus xiii.) probably includes leprosy as well as other affections, as psoriasis, scabies, eczema, and perhaps also syphilis. The same confusion explains, he thinks, the vast number of leper houses in Europe in the middle ages, for although true leprosy was probably then endemic, it is hardly conceivable that it should have prevailed so largely, especially as we have in syphilis a far more probable explanation of the vast increase in cutaneous disease which coincided with the Crusades. At the present day endemic leprosy is very circumscribed in Europe; it occurs in parts of Spain and Portugal, in Italy, on the Gulf of Genoa and the Adriatic, in Sicily (where it has been on the increase), in Greece, and especially in Crete; whilst it has died out in Roumania, Hungary, and Southern Russia, and has gradually decreased in Sweden, but prevails, as is well known, in Norway and in Iceland. Its distribution in other parts of the globe is too diffuse to summarise, but there is ample evidence that climatic and soil conditions are not the sole factors favouring it. The influence of a diet of fish, especially of putrid fish, which has been so staunchly maintained by Hutchinson, is discussed by Hirsch, who concludes that the theory is one-sided and untenable. The proofs in favour of a specific infective virus which have accumulated within the past ten years give all such speculations as to the operation of dietetic, hygienic, and climatic influences a subsidiary importance. The question of the contagiousness of leprosy is met by Hirsch with many facts showing how little there is to support it, whilst the transmission of an inherited predisposition is thoroughly established. That the disease can be acquired by Europeans who reside in leprous localities abroad is also established, and it is remarkable that a few cases have so arisen in "regions where leprosy as an endemic had been extinct for centuries." As with leprosy, so with syphilis; ancient writings afford evidence enough of its existence in the earliest times, but there is no question that about the end of the fifteenth century a great epidemic overran Europe. Some curious facts respecting

immunity from syphilis are to be found in the section dealing with its present geographical distribution. Thus it is comparatively rare among the Hottentots, and the pure African negro seems quite exempt; whilst in Madagascar and the adjoining island, Ste. Marie, the Malagasys enjoy an immunity which is not shared by the Hovas. Syphilis, indeed, has been spread over the globe by the advance of colonisation, and there are regions where it has not yet penetrated. Yaws or frambœsia, at one time thought to be syphilitic, is a specific highly contagious disorder of strictly tropical distribution; allied to it is the button scurvy of the south of Ireland and the Peruvian wart (verruga). Endemic goitre and cretinism are very fully dealt with; but the result of Professor Hirsch's inquiries tends to weaken the prevalent notion that these diseases depend upon a special character of soil or the impregnation of water by magnesia; and after refuting the various theories proffered in this connexion, he inclines to the view that there must be a specific morbid poison at the root of these closely related conditions. We must be contented with a mere reference to the articles on Ergotism, Pellagra, and Acrodynia—an interesting group of toxic affections attributable to the consumption of diseased grain. "Endemic colic" is proved to be nothing else than lead colic. The various parasitic diseases receive full notice, and their geographical distribution, known to be so markedly defined, is admirably sketched. Particularly may be cited the articles upon Trichina spiralis, Anchylostoma duodenale, Filaria sanguinis hominis, and the Guinea-worm. Since the publication of this volume a great deal has been added to our knowledge of anchylostoma. Of the remaining articles those on Puerperal Fever abound in facts of its infective nature; but the question of the various morbid conditions undoubtedly grouped under this head is not considered. The articles on Scurvy and Beri-beri are also full of information, and of much interest. But, in truth, the whole work shows the master's hand; and we cannot be too grateful to the New Sydenham Society for presenting us with a translation of it, and especially for having assigned the labour of translation to so excellent a scholar as Dr. Creighton. Professor Hirsch's work is one of those which will be of permanent value, and one which no writer on medicine should fail to consult. It is thus of great advantage to have it rendered into English in so worthy a manner.

The Rotifera or Wheel Animalcules. By C. T. HUDSON, LL.D.Cantab., assisted by P. H. GOSSE, F.R.S. Parts I. and II. London: Longmans, Green, and Co.

A MANUAL of the Rotifera has long been a desideratum in our language, and we cannot suggest the names of any naturalists by whom an exhaustive description of this interesting group could be better given than by Messrs. Gosse and Hudson. Mr. Gosse's writings on this very subject date back, if we mistake not, some thirty years, and Mr. Hudson is well known to have devoted much attention to it. Part I. contains an introduction in which the anatomy of a typical species, the Brachionus rubens, is given, with numerous figures of the several parts of the body. The second chapter contains the history of the literature concerning the rotifera, from which it appears that the first vague description of a rotiferon was given by Mr. John Harris, the rector of Winchelsea, nearly 200 years ago. In 1703 Leeuwenhoek published an account of some animalcules in the Philosophical Transactions, which the authors of the present work consider can be identified with Limnias ceratophylli. Eichhorn, after whom one species, the Stephanoceros eichornii, has been named, published a little book in 1781, in which he gives figures and descriptions of about a dozen rotifera that can be identified. Since that time about twelve or fifteen observers have published essays of importance, and their results will, we have no doubt, be gathered up in the work before us. The third and fourth chapters deal with the classification and the haunts and habits of the rotifera. There are five plates, which are really beautifully executed. The figures are so large that there is no confusion in the outlines of the several organs and the parts are drawn with great precision. The genera—if that word is permissible—which are illustrated are the Floscularia, Stephanoceros, and Melicerta. Part II. of this charmingly got up book contains an account of the Floscularidæ and of a part of the Melicertadæ. It is illustrated by seven double plates and one single one. The descriptions of the animals are distinct and clear, and the drawings leave nothing to be desired. We can recommend the work to all lovers of nature, and to any of the members of our profession who possess a microscope, and who can find time in the evening to examine the beautiful animals which a chance dip in a wayside pool may present to their notice.

Psychiatry. By T. MEYNERT. Translated by R. SACHS. Part I. New York and London: G. P. Putnam's Sons. 1885.

THIS is an American edition of Professor Meynert's Psychiatry, and will be welcomed by English readers who are unable to translate the German text. The translator acknowledges his shortcomings, but craves the indulgence of his readers. We must confess that he has not presented a readable book to the medical public, but we own that difficulties of translating a German work on the anatomy, physiology, and chemistry of the brain are great, though hardly insurmountable. The structure and architecture of the brain, the minute anatomy of the brain, anatomical corollaries and physiology of cerebral architecture, the nutrition of the brain, and an appendix on the mechanism of expression, are the chief headings of the work before us.

We cannot enter into a review of Meynert's anatomy, and must confine ourselves to a limited allowance of his physiology. "Sensitiveness is the only specific property of brain cells," we are told, and, viewed in the light of one's own interpretation, no doubt this statement may be regarded as true. Nerve cells are the most irritable and we suppose the most sensitive structures evolved from the primordial ovum, but they "discharge" energy in the manifestation of their only specific property. "In the fore-brain sensitiveness is converted into actual sensation." The meaning of this statement is not altogether clear. Actual sensation is no doubt impossible in the absence of the fore-brain—i.e., the cerebral cortex, It is not right to speak of unconscious sensations; we cannot have a sensation merely as the result of the action of sensory end organs, or the paths leading from and to centres situate below the cerebral cortex. When a frog deprived of his cerebral hemispheres survives, he does so by the aid of sensory impressions, which must not be regarded as sensations. Except for convenience of language, surely such a distinction of sensory impressions is not essential, and certainly not scientific. Viewed in the light of evolution, it is only those recently acquired functions that are perfectly conscious; repetition of functions leads to their unconscious performance. Consciousness is purely a question of degree. Are we sure that the brainless frog does not feel consciously the impressions that give rise to reflex actions? But the subject is endless. Meynert says that the volitional acts are nothing more than the perception or memory of the sensations of innervation. We cannot accept such a definition of a volitional act; nor are we certain that such acts differ much from so-called reflex actions. The deliberation that we presume must take place in the sensori-motor centres may be greater when volitional acts are concerned. but can we know whether a certain amount of deliberation does not occur in the simplest action?

THE LANCET.

LONDON: SATURDAY, MARCH 27, 1886.

THE striking and impressive ceremonial of Wednesday last may at first sight appear to have been more than commensurate with either the magnitude or public importance of the work it inaugurated. A little consideration will, however, show that the occasion was one which was well worthy the gratifying recognition which it received at the hands of Royalty. The readiness with which Her Majesty the QUEEN consented, or rather, if report speak truly, expressly desired, to take part in the proceedings of the day, was doubtless in large measure due to the personal regard which our Sovereign and the members of her family entertain for those eminent and sagacious counsellors of whom the justly venerated President of the College of Physicians stands foremost. Her Majesty gave expression to this feeling in her own well-chosen language, and the members of our profession will receive with satisfaction her graceful allusion to the physician who has served his QUEEN and his profession so well.

Although such personal considerations may have had some influence in ensuring the presence of Royalty upon this occasion, the profession must feel that the honour was conferred upon it as a body as much as upon the two Colleges directly concerned. It was evidence of the keen interest which Her Majesty takes in the labours of medical men, as well as of her appreciation of all they are doing for the good of humanity. In the course of her long reign she has witnessed many improvements in the social and material condition of her people which have been due to the increased knowledge and practical application of the principles of medicine. The Victorian era will stand out in history as the period in which science made its greatest advances; and what is true of science in general is quite as true of medical science, whereby so much has been done to solve the problems of disease, to mitigate its ravages, and to check its spread. It has been the era of sanitation—of disease prevention even more than of its cure. Within a generation how great and incalculable have been the gains derived from the wider observance of the laws of public and personal hygiene! The men who have done so much to diffuse a knowledge of the laws of health constitute that profession whose office it is to minister to the sick, with the result that there are some diseases which have almost been banished from the nosology, whilst there are others which are in a fair way to extinction. The world at large is apt to forget how much has been added to the sum of human happiness by such methods as directly arise from the knowledge of the causes of disease and of the conditions that promote health; and we are disposed to fear that as a rule the medical profession receive but little gratitude for the share they have taken in this work. Therefore we gladly and gratefully acknowledge this expression of Her Majesty's goodwill, for the welfare of her subjects has ever been her concern, and her discrimination of the part played by medicine in promoting that welfare is just and discerning.

The ceremony of Wednesday had a further significance. It was concerned more directly with the cause of medical education in this country. It is well known how this has improved during the past decade, for every advance in medical science is reflected in the student's curriculum. The great licensing bodies have the responsibility of prescribing and regulating this curriculum. Upon them depend all changes which, by improving and widening it, raise the character of medical education, and proportionately strengthen the resources of the medical art. As regards the two Royal Colleges, they have hitherto been separated in this important work, kept apart doubtless by the traditions of ancient rivalry. We live in a more liberal age; and just as in its higher functions the College of Physicians has got rid of much of its exclusiveness, so in its more important duty of granting licences to practise the barriers between the Colleges have been swept away. The co-operation of the Colleges in this work has its outward and visible sign in the building in the Savoy, which in future will form the connecting link between Pall-mall and Lincoln's-inn-fields. The result of this union will act in a most salutary manner upon the course of medical study, and will probably have still wider issues. For it must have occurred to many who witnessed the great gathering of physicians and surgeons that the stone laid by Her Majesty was not merely the foundation of an Examination Hall, but was the first step towards the realisation of a real University for London. All the elements of a medical faculty which might form the nucleus of such a University were present; the two Colleges are engaged in considering how best to solve the problem of giving to London students facilities for taking medical degrees; and it seems but to need one slight advance in their natural evolution to supply this want. Since all the teaching bodies are represented in the Colleges, the assumption by the latter of a control over teaching more direct than the formulation of a code of examinations should not be difficult or unreasonable. We may well regard the Royal recognition of the work done by the Colleges in the cause of medical education hitherto as an encouragement to them to pursue their combined efforts to the benefit of the profession, and through it of the community at large.

As to the ceremony itself, it could not have passed off with greater success; and those who have done so much in assiduous preparation for it as the Presidents (Sir W. JENNER and Mr. SAVORY), Dr. BIRKETT, Dr. OGLE, Mr. WOOD, Mr. H. POWER, Sir H. PITMAN, Dr. DUCKWORTH (Chairman of the Building Committee), Mr. TRIMMER, and Mr. SALTER (the architect of the Examination Hall)—to name only a few—are much to be congratulated. To these must be added the name of Professor JOHN MARSHALL, whose influence in the College of Surgeons has had so much to do in bringing about the union of the two Royal Colleges. Everything aided in making it successful. The bright and balmy day of early spring was all that could be desired in point of weather. The vast gathering of medical men was thoroughly representative of every branch of the profession and of every department of the two Colleges. The warmth with which they greeted Her Majesty, the Heir-Apparent, and those other members of the Royal Family who graced the proceedings by their presence, testified to the manner in which the honour bestowed on the profession was appreciated.

Her Majesty, who appeared in excellent health, performed the duties of the day with a genial cordiality which proved how thoroughly she entered into the spirit of the occasion, which was further shown in the reply she made to the address read by Mr. SAVORY. On behalf of the medical profession, we may echo the sentiments expressed by Her Majesty, and confidently trust that the undertaking commenced that day "may largely contribute to the further advancement of medical and surgical education." The day will be a memorable one in the annals of our profession, and it will be our own fault if the work so brilliantly inaugurated be not pursued to a great and worthy fulfilment.

ON the 16th inst. the Rivers Pollution Bill was rejected by the House of Commons, and the country has now simply to depend upon the legislation of 1876 as the only means for controlling the pollution of rivers and streams. This Act has been found to be altogether inadequate to prevent a growing nuisance and a growing danger to health. It was anticipated that it would control pollution by sewage and pollution resulting from manufacturing processes, but it may be said without exaggeration to have failed generally to prevent either the one or the other. This failure is due chiefly to the absence of any power to move local authorities, who can alone take proceedings under the Act. The local authorities upon whom this duty devolves are the sanitary authorities through whose districts or by whose districts a stream passes, and, as Sir CHARLES RUSSELL recently pointed out, it is these authorities who are themselves the chief offenders. To remedy this obvious defect, the Bill of this session proposed to confer on private individuals who were aggrieved by the pollution the right to institute proceedings at the cost of an authority which neglected themselves to take the initiative. This right is obviously so much open to abuse that it did not commend itself to the good sense of the House of Commons, but the fact remains that local sanitary authorities cannot be trusted to carry out the duty, and further machinery is required to prevent the Act from being a dead letter.

The real opposition to the Bill, however, probably came from those who feared interference with the manufacturing industries of the country. Under the Act of 1876 no authority can institute proceedings concerning pollution from manufacturing processes without the consent of the Local Government Board; but in the Bill of the present session it was proposed to confer the power upon any authority or person interested to take proceedings in a County Court without such consent. The Bill has now been rejected, but it is sure to make its appearance in a modified form during another session. There ought to be no difficulty in the way of amending it without injury to its usefulness, and so as to make it acceptable to a majority of the members of both legislative bodies; but it is perfectly obvious some course must be adopted which will neither leave the institution of proceedings in the hands of authorities who are indisposed to move, nor confer this right upon private individuals to protect their own interests at the public expense. There is indeed necessity for the creation of some other authority, upon whom should devolve the duty of investigating complaints and of taking proceedings where these are upon inquiry shown to be well founded. The existence of such an authority would render unnecessary the adoption by Parliament of definite standards of impurity, such as those incorporated in the Bill. Chemistry must doubtless play an important part in determining any decisions which are come to in any case under consideration; but it is at least open to doubt whether it is desirable for a standard to be incorporated in any Act which is based upon the estimation of the amount of carbon and nitrogen in any liquid. Mr. CHAMBERLAIN's belief in local government leads him to argue that the main remedy is to be found in improved local bodies for dealing with this and other questions; but we fear it is doubtful if this much-desired change, even supposing it were brought about, would enable any effectual action to be taken. The pollution which results from the negligence of one of these bodies constitutes so great a danger to other districts that the subject can only be dealt with seriously when it is regarded as a matter of national rather than local concern.

The promoters of the Bill will evidently have sufficient work before them to create an interest in the question sufficient to overcome the opposition which they will meet. They have not lessened their difficulties by omitting to deal separately with pollution due to sewage and pollution caused by manufactures. The danger to health of these two conditions is different, and there is a likelihood that they will succeed earlier with the former than with the latter. Although they have met with a temporary defeat, their labours have not been altogether thrown away, and they will doubtless at a later date bring forward a measure which will deserve and meet with a better fate than that which attended the rejected Bill.

DR. ROBERT F. WEIR recently read a paper before the Medical Society of the State of New York, in which he related seven cases in which he had treated chronic effusions in the knee-joint by antiseptic irrigation. As Dr. WEIR is careful to point out, this treatment was introduced by SCHEDE in 1875, and since then has been practised by many surgeons, especially in Germany; but, judging from the teaching of English surgical text-books and periodical literature, it has not won its way in this country, and Dr. WEIR says the same for America. It may therefore be well to draw attention to this plan of treating an obstinate and serious affection. The cases for which it is suggested are those of subacute and chronic serous synovitis, which resist the usual methods of treatment—rest, counter-irritation, absorbents, and pressure. It is not proposed that all cases of synovitis should be treated in this manner, but that a careful selection should be made. The treatment consists in tapping the joint with a trocar about the size generally used for hydrocele, and then, when all the fluid has escaped through the tube, a quantity of carbolic acid solution (5 per cent.) is injected through the cannula, and allowed to flow out. This is repeated until the fluid returns from the joint quite clear and free from flakes, and then the cannula is withdrawn, and the puncture closed by a pledget of boric lint, over which an abundant antiseptic dressing is fixed. In performing this simple operation it is well not to admit air to the joint; this can usually be prevented by carefully adjusting the pressure of the hand; an antiseptic spray may be employed to play over the cannula

as an additional safeguard. After the operation the limb should be fixed upon a back splint or in a plaster-of-Paris case. As a rule the pain and reaction afterwards are slight, and quickly subside, and all dressings can be removed in the second week, and the patient gradually bring his joint into use again. The synovial membrane can usually be felt to be markedly thickened, but the joint is otherwise sound. Dr. WEIR reports seven cases which he had treated in this way, and refers to thirty-two others which he has found recorded by other surgeons. VOLKMANN is stated to have treated hundreds of cases by this method, without a serious complication in any case. Such a sweeping and vague statement is, however, of little scientific value, and will certainly fail to recommend the method to judicious surgeons.

Putting aside such statements as this of VOLKMANN'S, the evidence before us certainly warrants a careful trial of this method in suitable cases. Our resources in such cases have not hitherto been great. Where rest, counter-irritation, compression, and the use of absorbents have all failed, three courses have been chiefly practised,—aspiration, injection, and drainage. Aspiration is sometimes successful, but is by no means reliable; often it fails to remove the whole secretion, and, whether from this cause or not, reaccumulation of the fluid only too commonly follows. Injection of the joint with iodine—as for the radical cure of hydrocele—has long been advocated, but is not now largely used in this country; experience has shown that it is not free from risk, and that suppuration may ensue. Antiseptic drainage of the joint, on the other hand, has been attended with good results, but it must be regarded as a severe measure. Should the precautions taken fail in their aim, a violent suppurative inflammation may be lighted up, imperilling the joint, the limb, and the patient's life itself. Compared with it, antiseptic irrigation of the joint is certainly a milder measure, is attended with less danger, does not require such complete acquaintance with the details of aseptic surgery, and when successful restores the patient to activity in a much shorter time than antiseptic drainage. On many grounds it commends itself, and if further experience corroborates the opinions already expressed upon it we shall have acquired a very useful addition to our means of dealing with a very troublesome affection.

THERE is a distinction to be drawn between suicide *from* fear and suicide *for* fear. There is not probably any large proportion of cases in which self-murder is committed for fear of evil. The fear of detection in crime very seldom induces a wrong-doer to kill himself. The chances of concealment generally appear to outnumber those of discovery. When once suspicion threatens to ripen into conviction the outlook darkens and the probability of suicide increases, but still the blunted moral sense seeks refuge in hope, and few criminals incline to self-murder for fear of conviction. After they have been convicted, suicide instead of death by the hand of the executioner is a matter of sentiment, and the traditional belief or impression that self-murder will entail evil after death is generally sufficient to determine the condemned to die on the scaffold rather than by their own hands. Suicide for fear of ills less than the death-penalty are probably even fewer. There is generally as much courage latent in the mind as will enable a man to face adverse fortune, however formidable it may seem. The very aggressiveness of the evil rouses a spirit of opposition. As a rule, few men, and scarcely any women, are craven enough to seek death as a way of avoiding adversity, or even extreme poverty, if it be not disgraceful. The suicides of women, fearful of shame, are, with rare exceptions, the indirect effect of mind-weakening or prolonged agony from fear, rather than cases of self-murder prompted by fear acting directly.

This is the distinction we are desirous of drawing between the two forms of self-slaughter: on the one hand, suicide because the offender is afraid of something, and prefers death to it; on the other hand, suicide which is the result of demoralisation or depreciation of the strength of self-control by the accumulation and wearing pressure of a terror which is not so much a particular fear as a general fearfulness. Even those who are least well acquainted with the clinical characteristics of mental disease are aware that *suspicion* is one of the salient symptoms of those varieties of mind derangement which in their development produce suicidal or homicidal propensities. There is at first a vague feeling of being in peril of some sort, a sense of impending evil; then comes the idea of being too much noticed by others; presently the sufferer feels that he or she is watched; and at length there comes the horror of being pursued or haunted by physical, or it may be spiritual, beings. In its making this madness has fearfulness rather than fear for a principal factor; and in cases of suicide occurring without previous symptoms of insanity there is, generally speaking, an inordinately rapid and, as it were, premature development of the same terror which in ordinary and more typical cases of mental disease culminating in suicide or a suicidal tendency, undermines the judgment or overpowers the will more slowly. Suicide *from* fear is familiar enough. It is commonly preceded by secrecy or shyness, with a fitful, moody state of mind, and an aspect of distrust or concealment. There is not unfrequently a tendency to seek relief in religious exercises, in prayer, Bible-reading, or the services of a church or society, although the subject of this impending trouble is seldom more than a quiet member, with retiring manners and an almost preternatural docility. When a man or woman who has been at least moderately, perhaps somewhat excessively, demonstrative and self-assertive, suddenly becomes subdued, retiring, or even diffident; when there is a tendency to repeat the smaller actions of common life—such, e.g., as shutting doors and drawers, turning off gas-taps, and the like,—as though to make assurance doubly sure; when there are noticeable sly glances or an air of fearfulness,—that person, however rational and even exceptionally calm and forbearing may be the general demeanour, is in peril of passing into such a state of mind as may readily express itself in suicide. We often hear of resignation, and great sorrows bravely borne in secret; there is far more of danger in the practice of these virtues than in the loudest and most aggressive complainings. Because the destructive operation of persistent fearfulness is carried on in secret and elaborately disguised by the victim of its evil influence, cases of this suicidal tendency are too commonly overlooked, with the result that deaths by self-murder from fear are very numerous; although in the great majority of

instances the morbid mental state is one which, if promptly and wisely treated, will prove susceptible of remedy. "Am I my brother's keeper?" is too conventional an expression of the prevailing sentiment in social life. If only there were more real friendliness in families and among men and women generally, there would be fewer suicides, not so much because the troubles of life would be relieved, as because that morbid sense of apprehension which does its most deadly work in secret would be checked in its development.

As practitioners of the art of healing, our duty is not limited to the feeling of pulses and the looking at tongues. If we would do our very utmost for those with whom we come in contact, it should be our aim to engender in the minds of our patients such a feeling of confidence in our honour and wisdom, that, without prying into their secret affairs, there may grow up in their minds a consciousness that there is always counsel and help to be had for the seeking. A mind struggling with the growing sense of fear will not always need to unbosom itself to secure relief. We all know how, in crossing a narrow plank bridge, the consciousness that there is a handrail will often give the pedestrian steadiness without the need to grip it. If he should require to grasp it, he knows it is there, and can find it. So is it with moral aid and guidance; the fact that it can be obtained when needed is in itself a source of strength and comfort, without actually confiding the trouble in words to a stranger. In this most terrible ordeal of *fear* the mind will often pass unscathed through the fire if only it can feel that there exists a trusty friend and protector at hand, and suicide from fear may thus be avoided. It is the noble and happy mission of the medical adviser—not the specialist, but the general practitioner—to minister thus lovingly to minds diseased, and there is no more worthy aim than to qualify oneself for the discharge of this most important function.

THE meeting of the Council of the Hospital Sunday Fund at the Mansion House on Tuesday was a very satisfactory one. It was called to consider certain suggestions by Dr. WAKLEY for increasing the public interest in the Fund and developing the collection to proportions more commensurate with the needs and merits of the hospitals of the metropolis. In the unavoidable absence of Dr. WAKLEY, these suggestions were introduced to the notice of the meeting by Mr. HENRY C. BURDETT. They are briefly as follows. 1. That a list of the wealthier workers and landowners in London who are non-resident be prepared in anticipation of Hospital Sunday. 2. That a week before the date of Hospital Sunday a letter by the Lord Mayor be sent to each of the non-residents. 3. That arrangements be made for a public meeting to be held in different parts of London on each day of the week preceding Hospital Sunday. 4. That the committee of every hospital in London shall be urged to prepare statements showing the work which it accomplishes: (*a*) for the whole of London; (*b*) for people outside of London; (*c*) especially for the inhabitants of the district in which it is situated; and that the hospitals in each district be asked to combine to canvass ministers of religion and the influential residents in the district, with a view to excite local as apart from metropolitan interest in the hospitals, to promote attendance at the public meetings and increased contributions to the Fund. 5. Two special supplements of THE LANCET will be published, one in the week preceding and another in the week following the collection, the first giving a description of the claims and needs of the hospitals, the second a record of special sermons on Hospital Sunday. 6. The hospitals or portions of hospitals might be usefully thrown open to the public under certain regulations, and an attempt might be made to induce the wealthy to visit these institutions, while special facilities might be afforded to the clergy to make themselves personally acquainted with the working and management of one or more of the hospitals.

The meeting of the Council was one of the largest and most representative which has been held. The suggestions, though not discussed in detail, were very cordially received, and in the end, on the motion of Sir SYDNEY WATERLOW, seconded by Sir EDMUND CURRIE, were referred for consideration to a Special Committee. This Committee was empowered to spend on its investigations not more than £150. It is the pride of the Council of the Hospital Sunday Fund to be very economical in its methods, and to spend all the money it gets, save something like 3 per cent., on the sick poor. Sir SYDNEY WATERLOW therefore was quite right in stipulating that the Committee should not exceed a certain limited amount without further appeal to the Council. But, obviously, statistical and clerical work and the holding of public meetings cannot be carried out without some outlay. This will be well justified if it brings a few more thousands into the coffers of the Fund. Sir EDMUND CURRIE in his speech showed that while the hospitals were very grateful for what was done, the amount raised was quite inadequate to the want, and that in some cases small contributions to the Fund were used as excuses for not giving proper annual subscriptions. Mr. BURDETT replied to the latter objection pretty effectually by showing that in places where Hospital Sunday was established subscriptions increased rather than diminished, and that the sermons of Hospital Sunday were a great means of diffusing knowledge of the work and claims of hospitals. The public will look forward to the work of the Committee with interest. There must be thousands of gentlemen who find their work and wealth in London who leave the town from Saturday to Monday, and so miss the powerful appeal which is made to the residents in London. Such gentlemen will not be ungrateful to the Lord Mayor for reminding them of the claims of those institutions, in which their servants and poorer neighbours find the highest medical and nursing skill, and their medical attendants the education which makes them so efficient in those emergencies of disease which arise even in the country.

A SPECIAL meeting of the Royal Medical and Chirurgical Society will be held on Tuesday, the 30th inst., at 8.30 P.M., when the subject of Supra-pubic Lithotomy will be discussed. Papers will be read by Mr. Barwell, Mr. Walter Rivington, and Mr. W. H. A. Jacobson, and an interesting debate may be anticipated.

NEXT May a Medical Congress under the auspices of the Scientific Athenæum of Valencia is to meet in that city for the "calm and dispassionate discussion" of Dr. Ferrán's anti-cholera inoculations, with the hope of arriving at an unbiased view on that much-debated subject.

Annotations.

"Ne quid nimis."

SIR WILLIAM JENNER, BART., K.C.B.

AT the present time it may be interesting to briefly recall the circumstances which led to the appointment of Sir William Jenner as Physician to the Queen, and many of our readers will still remember the accident by which the talented and respected physician who, had he lived, would in all human probability have obtained the coveted post—we allude to the late Dr. Baly—lost his life. The late Dr. Parkes had been spoken of as the probable successor of Sir James Clark, but his failing health rendered such an appointment undesirable. Sir James had long had the intention of introducing Dr. Baly to Her Majesty, and of recommending him as successor to himself in the post of Physician in Ordinary to the Queen; and there is little doubt that this design would have been carried out had it not been for the accident resulting in Dr. Baly's death, which occurred on the South-Western Railway whilst he was travelling to Guildford to see a child suffering from diphtheria. The carriage in which Dr. Baly was seated, asleep, with his handkerchief over his face, was turned completely over; the door near him flew open, and he was tilted out, receiving in the fall injuries which killed him immediately. Although there were other passengers in the same compartment, they escaped with slight or no injury, and it was thought at the time that Dr. Baly came by his death owing to his being asleep when the accident occurred, and consequently unable to make any effort for his safety. It is a curious coincidence that the local practitioner under whose care the child at Guildford was had mentioned to its parents the names of three physicians, Dr. Baly, Dr. Jenner, and another whose name at this moment has escaped our memory, as being suitable to be summoned in consultation, Dr. Jenner going to see the little patient the next day, when he also identified the body of Dr. Baly. Some time afterwards Sir James Clark introduced Sir William to the Queen, and his appointment was soon gazetted as Physician in Ordinary to Her Majesty, of which onerous and responsible post he has now discharged the duties and enjoyed the honours for over twenty-five years. It is worthy of mention that Her Majesty has during her lifetime been under the care of only two physicians—Sir James Clark during, roughly speaking, the first forty years, and Sir William Jenner during the remainder. The Queen is, we understand, a model patient, and her confidence in her medical attendant, when once vouchsafed, is implicit. In this respect, as in many other aspects of her life, she affords an example which many of those over whom she reigns could follow with advantage. For five consecutive years Sir William Jenner has been President of the Royal College of Physicians, and although we believe that he will be invited to retain his office, we understand that he will decline to take upon himself the duties of this important position for another year. The interesting ceremony, of which we give a detailed account elsewhere, seems to be the climax of a life's work of no ordinary value to the profession which he so much adorns, and by the members of which he is so universally and deservedly respected. It is well known that it is mainly through Sir William's influence that the Colleges of Physicians and Surgeons have been brought to act in concert in building the new Examination Hall, and it is also certain that Her Majesty has consented to lay the foundation-stone of the building entirely through his mediation. To her appreciation of Sir William's successful care of her may be attributed her words of graceful praise, "The President of the Royal College of Physicians, with whom I have been long personally acquainted, and whose eminent abilities and far-seeing knowledge have justly placed him in the foremost rank of those who have benefited mankind."

THE GOVERNMENT COMMISSION ON HYDROPHOBIA.

WE have reason to believe that the eminent pathologists, Sir James Paget, Professor Burdon Sanderson, and Dr. Lauder Brunton, have, together with Sir H. Roscoe, who initiated the matter, consented to serve on the Commission to inquire into M. Pasteur's method of inoculation for hydrophobia; and that the Government intend to seek in addition the services of a few distinguished physicians, including Sir W. Jenner. As soon as the details are arranged the Commission are expected to proceed to Paris, personally to investigate M. Pasteur's proceedings and their results.

MILK ADULTERATION.

WE have lately drawn attention to a form of milk adulteration somewhat different from the time-honoured skimming and watering. The new offence consists in the addition to pure milk of the skim-milk obtained from the "cream separator." We commented, not for the first time, on the defective state of our law, which compels the public analyst to adopt as his standard of purity the poorest of cow's milk. There can be no doubt that genuine milk is sometimes found which contains as little as 11 per cent. of solids—viz., 2·5 per cent. of butter-fat and 8·5 per cent. of sugar, albuminoids, and ash. It is admitted by all that such milk is abnormally poor, and the selling of it a serious danger to the public health, and yet the public analyst is unable to stop its public sale, for the law most absurdly compels him in his certificate to state in figures the extent of the adulteration which has been practised, the quantity of water which has been added to, or the quantity of cream which has been removed from, the milk. If milk were a substance of constant composition, like sugar, this would be easy enough, for, thanks mainly to the labours of English analysts, the methods of analysis are now singularly accurate. But milk is a very variable mixture, and an analyst is therefore obliged to take as his standard of purity the very poorest milk he can find. Even then he is not quite safe, for it is asserted by many that milk may be drawn from a cow's udder which is even poorer than this standard. What the law ought to do is evidently to fix a limit of strength as regards fat and total solids, below which milk shall be deemed to be adulterated for the purposes of the Act. This would render the work easy and satisfactory, and would leave to the vendor no serious difficulty. We are glad to find from a report which has just reached us that this simple and satisfactory solution of the problem has already been attained by at least one enlightened board, which, however, is unfortunately in America, and not in England. It appears that in the State of Massachusetts an "inspector of milk" has long been a recognised official, but it was only at the commencement of the last official year that a new law gave him the power of attacking the evil efficiently. Mr. James F. Babcock, the present officer, is entitled the "Inspector of Milk and Vinegar," and his report for 1885, addressed to the Mayor and Board of Aldermen of the city of Boston, is an interesting and important document. Under the new law every carrier of milk must be licensed, and every vendor of milk in a "store, booth stand, or market-place" must be registered, the fee in each case being fifty cents. The inspector has power to enter and take samples of milk, butter, oleomargarine, and vinegar, and to lodge complaints, followed by legal proceedings when the law is deemed to have been violated. From April to December last 9853 inspections were made

and 110 complaints lodged, of which only five were dismissed. Under this vigorous action the percentage of adulterated samples of milk sank from 38·60 in April and May to 16·19 in November and December, and it can hardly be doubted that a still further improvement will be effected. A well-furnished city laboratory has been provided, and the report describes in detail the apparatus it contains, its cost, and the methods of analysis employed. The latter will be interesting to many of our readers, and may be briefly described. In the preliminary examination the specific gravity is first determined by a Piles's hydrometer, correction being made for temperature by means of a table given in the text. The standard temperature is 15° C. (59° F.), but the standard specific gravity is not given. We presume further analysis would be required if it fell below 1·033. The approximate percentage of fat is also in every case estimated by means of Feser's lactoscope, in which four cubic centimetres of the milk are diluted with water in a glass cylinder until black lines on a vertical white glass rod in the centre are visible. Graduations on the outer glass then give the result. If these two preliminary tests give doubtful results a more complete analysis is made, pretty much in the usual way, the fat being removed by boiling petroleum "benzine"—spirit we presume—and the sugar by the polariscope. This system is of course imperfect, but it is calculated to give concordant and tolerably trustworthy results. The chief fault seems to be that the fat is not directly weighed, and that, as we understand, the total solids and the solids not fat are not carried to constant weight. The milk standard is, as we have before mentioned, fixed by law. Milk is considered adulterated unless it contains 13 per cent. of total solids—namely, 3·7 of fat and 9·3 solids not fat. This is a somewhat severe standard, and possibly in England 3 per cent. of fat and 9 per cent. of solids not fat would be high enough. But, on the other hand, there is force in Mr. Babcock's remark, with which we may conclude: "The public have a right to demand that the milk supplied to them shall be of good *average* quality; and it is asserted that the present standard in Massachusetts is precisely this, and no more."

THE USE OF ANÆSTHETICS.

WE have deemed it necessary from time to time to call the attention of our readers to the subject of anæsthetic agents as employed in surgical operations, and more especially to the dangers which attend upon the use of chloroform when employed alone. The frequent occurrence of a fatal result from this agent, as recorded in our columns, has rendered it necessary for us to draw attention to the matter and seriously put the question to our surgical brethren as to whether they are justified in using chloroform as an anæsthetic, seeing that a considerable risk is of necessity associated with it, however carefully it may be employed. This question assumes much greater seriousness when it is remembered that large experience and careful investigation have proved beyond a doubt that the use of other agents which produce insensibility to pain is not accompanied with so much risk as attends the employment of chloroform alone. If no other anæsthetic were obtainable, we should have to balance the good results against the evil and be content with the former; but this is not the case. Although there are some drawbacks to the use of ether, inasmuch as it is not so manageable as chloroform, and, in the case of persons liable to emphysematous or bronchitic attacks, is attended with inconvenience and some risk, yet for the majority of adult patients this agent may be employed with comparative safety. Then, again, extensive experience with the safe and effective anæsthetic composed of one part of alcohol, two parts of chloroform, and three parts of ether, has demonstrated that it is not only as powerful in producing insensibility to pain, but that it is in a great degree less dangerous than chloroform. This form of anæsthetic is now used largely, both in hospital and in private practice, and a fatal accident from its use has rarely been recorded, whereas the announcement of a death from the use of chloroform alone is a matter now of almost weekly occurrence. We think it our duty to state that a surgeon is not justified in recommending the employment of chloroform as an anæsthetic whilst he has it in his power to make use of agents which are capable of producing the same effect in annulling pain without anything like the danger which results from chloroform when used alone. It is only fair towards a patient who is ignorant in these matters, and who places his confidence in his medical adviser, that if he is to undergo a surgical operation those methods which are the least dangerous as well as the most efficient should be adopted. No surgeon would at the present day recommend a patient with aneurysm of the popliteal artery to undergo ligature of the femoral before trying the less dangerous method of pressure, and no surgeon would think of performing the formidable operation of lithotomy in a case where a stone could be crushed. In either of these cases he is guided in his conduct towards his patient by the knowledge of the fact that one operation is as effectual and much less perilous than the other. In like manner we conceive it to be the duty of a surgeon about to perform an operation to employ the form of anæsthetic which is proved by experience to be attended with the least amount of risk. Chloroform is by far the most dangerous agent to employ; as a rule it should be discarded except in particular instances, such as in operations on children who bear it well, or on old persons who are afflicted with pulmonary complaints, to whom the use of ether is decidedly objectionable.

THE CONTAMINATION OF BRITISH UNIFORMS.

A MEETING of workwomen engaged at the Army Clothing Depôt at Pimlico, held last week at Portcullis Hall, Westminster, revealed the fact that the sanitary precautions taken some years since have of late been entirely abandoned. Eight years ago we clearly demonstrated how uniforms made in the private dwellings of the workers were often brought in contact with small-pox and scarlet fever patients. The Secretary for War at that time, Mr. Hardy, acknowledged that of the three viewers who examined the clothing brought from outside one had contracted small-pox during the course of the previous five years. Another viewer and his daughter suffered from small-pox just before the five years in question (1872-77). In 1878, when our revelations on the subject were published, a great alteration was made in the management of the Army Clothing Depôt, which we were assured was based on the following principles:—A slight reduction in the rate of wages, so that the Government might with greater facility compete with private contractors, the latter being even more likely to neglect the necessary sanitary precautions. All out-door work was in principle to be abolished. No new hand should be allowed to take work home, and it would only be continued with respect to some soldiers' widows and others to whom the State was morally indebted and who had no better means of subsistence; there were but very few such cases, and these would gradually die out. Thus the uniforms would ultimately be entirely manufactured within the walls of the factory, where the workpeople would enjoy healthy quarters, ample ventilation, and where the cloth could not be brought into contact with persons suffering from infectious disease. These promises have, however, been wholly forgotten. The workwomen say that their wages have fallen so low that their patience and powers of endurance are exhausted. Questioned in the House of Commons, Mr. Woodhall replied that the

average wages in 1884 amounted to 15*s.* 8*d.* per week, and in 1885 to 15*s.* 8½*d.* It seemed therefore as if there had been no reduction, and that is certainly the case so far as the amount of money paid is concerned; but the quantity of clothing made for this sum according to the present piece-work tariff is considerably in excess of what was formerly required. To earn this the women have to work long hours in the night. Overtime, however, is contrary to the stipulations of the Factory Act, and therefore the women take the work home. As a matter of form, it is said this is not allowed; as a matter of fact, it is the general custom. But for this, the average wages paid could never have been maintained at their former figure. About 500 women were present at the meeting in Portcullis Hall. They greeted with laughter the suggestion that they were not allowed to take work home. When those who were in the habit of taking work home from the factory were asked to hold up their hands, every hand was uplifted. Then, to make sure of the test, the workwomen who had not taken work home were called upon to hold up their hands, and not a single hand was raised. Hence it seems clear that the sanitary precautions deemed necessary and the Factory Act are both openly violated at the Army Clothing Depôt. Home work, with its attendant danger of infection, instead of being restricted to a few exceptional cases, is now, on the contrary, the universal practice. The Factory Act, stipulating that women shall work only ten hours, is flagrantly defied by their continuing at night, and in unhealthy, overcrowded homes, identically the same task which was begun during the day in the healthy and well-ordered State factory. How can we hope to suppress the sanitary defects and the illegal practices of the "sweater" in the East-end when in the West-end the managers of this model Government establishment contrive to evade the law? Economy may be a virtue, but it becomes the worst form of extravagance when it compromises public health. Nor is it fair to the public, who are anxious that those who work for the State should at least earn enough to afford means of living. We feel convinced that public opinion will support us in demanding that the Factory Act shall be duly observed, home work strictly suppressed, and the scale of prices so revised that the average of 15*s.* 8*d.* can be earned within the walls of the Government factory and within the working hours prescribed by the law.

LONDON DUST.

MR. MILLAR, the Vestry Clerk to St. George the Martyr, Southwark, has proposed to Sir Robert Rawlinson a comprehensive scheme for dealing with the dust and refuse of the metropolis. His suggestion is to reclaim the useless land from Tilbury to Southend by removing to it all the refuse of London. The Government for this purpose would have to engage wharves along the river which would be used as shoots by the various vestries and district boards, whence the dust would be conveyed to its destination by small tugs and barges. The cost of conveyance to Tilbury he proposes should be paid by a metropolitan rate, and the cost of reclaiming the land by the Government. Mr. Millar's scheme will certainly commend itself to those who regard this subject from the public health point of view, but it could not be carried out without interference with certain industries. Brickmakers would argue that the present system which is carried on in London dust-yards is necessary for the purpose of enabling them to manufacture bricks for the growth of London. Farmers have learnt to depend upon London road-sweepings and "soft core" for manure; and last, but not least, contractors have learnt to make sufficient profits out of London dust to make their influence felt by local authorities. But this industry is less remunerative than formerly, and as a result there is often a tendency on the part of the contractor to leave the dust in dust-bins rather than devote it to the uses we have indicated. Hence there has for some time been a growing feeling that some radical change was necessary in the method of dealing with the waste material of this large city. Efforts have been made by more than one metropolitan medical officer of health to bring to the notice of his sanitary authority the advantages of burning house refuse in some such manner as that practised in the north of England. Vestries have been taught continually that they must learn to think of dust-removal in its health rather than its economic relations. But the influence of the contractor and the force of custom have always stood in the way of any alteration of procedure. Mr. Millar's scheme will, we hope, revive the whole subject. Subject to regular removal from houses the money cost of dealing with refuse is an important consideration, and it is obvious that every effort would be made to utilise the material in some way that would make as much return as possible for the money expended in its collection. Mr. Millar calculates that the metropolis now pays £120,000 annually for this purpose. If his scheme be such as to cost no more than this, it is even then worthy of consideration, for the removal from houses would not then be dependent, as now, upon the requirements of the brickmaker or the farmer.

RUPTURE OF PREGNANT UTERUS; PORRO'S OPERATION; RECOVERY.

A COMMUNICATION by Professor Slawjansky to the Surgical Society of St. Petersburg, on a case in which he successfully performed Porro's operation for rupture of the gravid uterus, is published in the February number of the Paris *Annales de Gynécologie et d'Obstétrique*. Slawjansky states that he has collected 175 cases of the operation which was first practised by Porro at Pavia in 1876. It was performed by Dr. Prévot at Moscow in 1878, ten hours after rupture of the uterus, but the patient died the fifth day in consequence of hæmorrhage from the pedicle. C. E——, aged thirty-seven, within one week of full term, was knocked down by a tramcar while crossing one of the streets of Vassili-Ostroff. Considerable hæmorrhage ensued from the genitals, and the patient lost consciousness while being carried to her home. She was first seen in the clinique of the Imperial Academy of Medicine by Professor Slawjansky twenty-six hours after the accident. The patient was then quite conscious; skin pale; mucous membranes slightly cyanosed; ecchymoses on the inner side of the left eye and on the buttocks; abdomen very tender on pressure. Temperature 38·1° C.; pulse 138. Objective examination of the enlarged abdomen, conducted under chloroform, in consultation with Professor Bider, gave the following results: Immediately under the abdominal wall, and towards the left iliac fossa, could be felt the sutures in the fœtal head. Upwards and a little to the right the trunk of the fœtus and some of the ribs could be distinguished. The breech was above and a little to the right of the median line. On the right of the fœtus, over an extent equal to two hands' breadth, was experienced a sensation of decided resistance, but without defined outline. The fœtus was movable, heart sounds not audible. By vaginal examination the cervix could be felt with easily dilatable orifice admitting two fingers. Beyond the internal orifice the uterine wall was reached on the right side, and the edge of the placenta easily touched; but on the left the uterine wall could not be discovered, and, on practising bimanual touch, the fingers of the two hands could be approached until they were only separated by the abdominal wall. Penetrating more deeply and upwards, a fœtal foot could be felt, and, between it and the exploring fingers, the presence of the fœtal membranes. But nowhere could the edges of the uterine rupture be detected. All circumstances con-

sidered, *traumatic rupture of the gravid uterus* was diagnosed, and the necessity recognised for immediate delivery. Exploratory laparotomy having been decided upon, three hours after the patient's admission Dr. Matveef administered chloroform. The temperature was then 38·6° C.; pulse 138; respiration 25. The operation was performed under the strictest antiseptic precautions, and Dr. Fisher was the principal assistant. Immediately over the fœtal head an incision of two centimetres was made into the abdominal wall, and one of two millimetres into the peritoneum, giving issue to a mixture of bloody serosity, meconium, and cheesy flocculi. The hairy scalp of the fœtal head could then be felt in the abdominal cavity, and the parietes and peritoneum were divided with scissors to the extent of twelve centimetres, the dead fœtus seized by the head and extracted gently. On introducing the hand into the peritoneal cavity with a view to extract the placenta, this was found firmly adherent, apparently to the outer surface of the womb, and it was thought preferable to withdraw that organ through the abdominal wound. It then became evident that the uterus, torn from side to side in its upper third, was completely everted. The placenta and membranes were completely adherent throughout their whole extent. The internal orifice was not visible, being bridged over by the membranes. The womb had thus the appearance of a mushroom, round the top of which the Fallopian tubes proceeded to their insertion. An elastic ligature having been placed on the cervix, the placenta and membranes were detached; the mushroom-like shape of the everted uterus was then still more perceptible. The cervix was now more firmly secured with a second elastic ligature, and the uterus and appendages removed with the bistoury. The pedicle was divided into two, and each portion secured by separate elastic ligature. While performing careful peritoneal toilette, evidences of general peritonitis became manifest, with deep redness of the intestinal coils and a dull velvety appearance of their surface. The pedicle was fixed in the lower part of the wound, the ligatures projecting through it and its edges closed with nine deep silken sutures. Powdering its surface freely with iodoform, covering it with two layers of iodoform gauze, a thin layer of sublimated wadding, and a hypogastric bandage, constituted all the dressing. The operation lasted forty-five minutes. The patient was removed into an isolated room, and on waking said she felt better, and the pains had left her. The pedicle stump dried up rapidly and separated on the twenty-third day. The sutures were removed on the fourteenth day, with the exception of the two near and beneath the pedicle, which were removed on the twentieth day. On the fifth day copious diarrhœa set in and lasted four days. The maximum of temperature was 39·1° C., of pulse 126. From the third day after the operation the urine contained some albumen, and occasionally a considerable number of red and white globules. The nephritic affection disappeared on the twentieth day, and on the thirty-sixth the temperature was normal.

CHOLERA AND WATER.

IN an address delivered before the South Indian Branch of the British Medical Association, Surgeon-General Furnell draws attention to the relation which exists between the water-supply and the prevalence of cholera in India, and at the outset he declares that the remedy against the recurring epidemics of this disease lies in the hands of the authorities if they will but have the courage to use it—namely, to provide the people with an uncontaminated water. Speaking generally of Southern India, and more or less of the whole of the immense continent, it is said that every hamlet, village, and town has a water-supply open, and easily open, to the foulest contamination. Detailing the special means by which water is fouled by the inhabitants of our Eastern Empire, Dr. Furnell asks two questions—namely, first, have we any proof that water contaminated with cholera dejecta will spread cholera? and secondly, have we any proof that a people supplied with a pure and uncontaminated water supply escape cholera? Proceeding to give instances which in India supply an affirmative answer to the first question, and of the crucial evidence obtained as to it, he states that as regards the second question the evidence procurable is circumstantial only. Indeed, improvements in water-supply have so generally gone hand in hand with other sanitary reforms that it becomes, as a rule, next to impossible to eliminate all other conditions, and to declare that immunity from cholera is the result of one improvement only. But in reference to the town of Pondicherry, there does appear to be reason, according to Dr. Furnell, to attribute the singular immunity from cholera which that place has experienced, at a time when such neighbouring towns as Cuddalore were severely infected, essentially to an improved water; and it is added that in so far as such sanitary improvements as are involved in securing cleanliness are concerned, Pondicherry is no better off than Cuddalore. Indeed, taking into consideration all other reasons alleged for the difference in the behaviour of cholera in these two towns, Dr. Furnell arrives at the conclusion that the unique water-supply of Pondicherry, free as it is from sources of contamination, supplies the only explanation. The effect of the paper is to leave a strong impression of the need of the improvement of the water-supplies for the populations of India, and as such it will receive the support of all interested in the prevention of cholera, irrespective of their views as to the nature of the contagium to be dealt with.

THE CHEAP DINNER MOVEMENT.

THE movement for supplying wholesome food and dinners to the people at a cheap rate has received a further development from the able and interesting paper read by Captain Wolff on Thursday week last at the Parkes Museum of Hygiene. The audience, consisting of the Fellows and Members of the Sanitary Institute, and presided over by Dr. Richardson, listened with great interest to the essay, and carried out afterwards a very useful discussion. Captain Wolff, who has personally traversed the greater part of the metropolis in order to determine where the wants of the people are most pressing, displayed the results on what may be called a food map of the metropolis. In some of the quarters thus delineated it may truly be said that there is not only deficiency of provisions at a moderate cost, but that the means for the preparation of food of any kind in a wholesome form are completely absent. There are neither kitchens, nor fires, nor cooks. In the wildest parts of the world it would be possible to find better provision than here in the midst of civilisation; and how it can be expected that men under such conditions should live a law-abiding, civilised existence? If a man drinks beer he thinks beer, said Samuel Johnson; and equally true is it that, if a man is forced to feed as wolves feed, he will grow wolfish and out of the ordinary rules of human government, however wisely those rules may have been framed for the common good. The design now suggested proposes to meet the dangers and the difficulties incident and consequent on starved revolt by sensible prevention of danger. It asks for no charity which, as the chairman insisted, cannot be a permanent aid; but it opens to all thoughtful persons a mode of applying their time and their money in a way that shall yield a return for both, and confer a national service, which it were well to render while times are still peaceful and the masses loyal. The subject is not technically one which concerns the profession

of medicine more than other professions or callings; yet we are glad to see that medicine is taking the lead in the practical working of it. If Dr. Richardson and those who are striving with him can but succeed in establishing half a dozen kitchens on a model scale, the success will, we seriously believe, be quickly assured. The movement would rapidly grow, and in a few months the metropolis, in every part of it, would have comfortable dining quarters at which the poorest would be fed wholesomely, rationally, and comfortably. A public kitchen and dining-room in rivalry to every public-house would be the grandest counterblast to public intemperance that was ever set up.

HYDROPHOBIA AND THE DOG REGULATIONS.

WE are glad to see that police notices have been extensively advertised to the effect that the order of Dec. 4th, 1885, which requires that all dogs while in the streets of the metropolis (within six miles from Charing-cross) not being led by some person are to be muzzled is still to remain in force. There can be no doubt that these regulations, and the consequent wholesale destruction of dangerous, ownerless, and useless curs have been successful in reducing the number of cases of rabies and hydrophobia. Indeed, if proof be needed, it is furnished by a return, moved for by Sir Richard Cross, and issued on Wednesday last, which shows that since the order for muzzling was put in force on Dec. 10th the decrease in the number of cases of rabies reported has been marked. In December last forty-six cases were reported, in January twenty-seven, and in February fourteen. The number of deaths from hydrophobia reported in the metropolitan district was twenty-six in 1885, and one in January, 1886. Considering this great increase in the usual annual number of cases, it is no wonder that we have been passing through what is generally called a "hydrophobia scare"; for once in a way, however, a "scare" has made its influence widely and, let us trust, permanently felt, and has so far had good results. It is to be hoped that when the present epidemic has died away and this terrible disease is again almost lost sight of by the public, the authorities will still continue to exercise some sort of control over wandering and ownerless dogs.

NEW FRENCH MILITARY SANATORIUM.

THE arrival at Toulon of a transport with two hundred invalids from Tonquin has caused no small sensation and alarm. The evidence collected shows that the cholera was not imported from Tonquin; and, indeed, there had been cases of cholera at Marseilles some ten months before the *Sarthe*, the incriminated vessel, reached the port of Toulon. Nevertheless an unpleasant impression prevails, and when it was announced that the sick men were to be located at the island of Porquerolles a perfect outcry was raised. The clamour was so loud that the Minister of Commerce, M. E. Lockroy, has been compelled to visit Marseilles, Toulon, and Porquerolles. The latter place is the largest of the Golden Islands, or Isles d'Hyères. It is situated six miles out at sea and nine miles from the well-known winter station of Hyères. As a healthy and beautiful spot nothing better could be desired. The island is divided into seven ranges of small hills, with innumerable nooks and sheltered corners where the sea air may be enjoyed without disturbance. The rich vegetation, the pine-trees, thyme, myrtle, and tamarisk, perfume the atmosphere with balsamic exhalations. For a sanatorium it would be difficult to find a better position, but for the fact that it is already used for a convalescent hospital for soldiers coming from Africa. There are also small local interests that might be injured by the presence of dangerous and contagious forms of disease imported from the colonies. The sanitary condition, it must be added, of the existing hospital is most unfavourable. It is a wretched old building, with no sanitary contrivances whatever, and very insufficient means of ventilation. Under all these circumstances it would be much wiser to select the neighbouring island of Portcros. As may be gathered from its name (a derivation of *port-creux*), it has a better harbour, and has the advantage of being further out at sea. Also there are barely fifty inhabitants in the island, and, like Porquerolles, it possesses rich balsamic vegetation with hills affording good shelter from the winds. Here tent or field ambulances could be established which would be far safer than the malodorous and old structure called the hospital of Porquerolles. We understand that M. Lockroy himself favours this solution of the difficulty, and trusts it will be acted upon without further loss of time. With so many beautiful sites and the exceptional climatic advantages of the Riviera, the French Government should be able to provide its soldiers with all that is needful for their restoration to health.

DOCKED FEES.

A CORRESPONDENT writes:—"The practice of giving sovereigns instead of guineas to medical men is one which, I think, is worthy of notice on account of the great destruction of good feeling which it occasions. Its origin is obscure; possibly it dates from the replacement of the guinea as a coin by the sovereign. The practice is almost confined (curiously enough) to the aristocracy and to those who, being perhaps distantly related to some member of that body, seek to emphasise the fact by the adoption of their defects—in the same way as parasites of Royalty have from time to time imitated the physical imperfections of a Sovereign—both, possibly, on the principle that 'imitation is the sincerest flattery.' I do not mean to say that this habit is universal among the aristocracy, many of whom discharge their debts not only with exactness, but with generosity. Now, after the authentic history of the two knights who fought about the colour of a shield, and found on looking at both sides of it that it was, after all, both gold and silver (the shield was, without any doubt whatever, in reality a guinea), I feel that no other method can be so conveniently adopted as that which led to the resumption of harmonious relations in the case above recorded. First, from the point of view of the "upper ten." The guinea is an obsolete coin; small change is a nuisance. What follows? To dock the fee and give a sovereign? Nay; if the airs of a grand seigneur are to be adopted, by all means give another sovereign, or at least gold. Now, the practice is *not* kept up from inadvertence; for it is not unfrequently the subject of animated discussion among members of the aristocracy themselves. From the point of view of the medical man, it means, first, pecuniarily (a consideration of the least importance on this occasion), a tax of 5 per cent., a loss on an income of 2000 guineas of £100. On each occasion on which a sovereign is tendered singly, it means that the good nature, forbearance, and good manners of the medical man are presumed upon. If a lump sum is paid in this manner, it means that the patient deliberately withholds part of his debt. Let each person in the habit of acting in this way think what he would say to a tax of 5 per cent. being levied on all his income by each private individual through whose hands it passed; what would he or she say to such a proceeding in the case of such a commonplace matter as the price of a horse or the payment of a bet? But this is the least part of the matter. The fee tendered by a patient is not *only* a payment. It should be rather the outward and visible sign of gratitude for benefits received, which can never be entirely paid for by money. There are many little kindnesses constantly rendered by us for which we neither ask, nor expect, nor would receive money payment; our only reward is the gratitude and friendly regard of our patient; and it is just this, the dew on the grass, the bloom on the

grape, which is by this act necessarily destroyed. I will go further, and say that most of us would willingly provide the shilling rather than lose the sentiment. As concerns the conduct of our profession, I am far from hinting or advising that they should on all occasions call the attention of a patient to a 'docked fee,' but opportunities arise on which it is possible to correct erroneous ideas without giving offence or disturbing friendly relations. Such opportunities should not be missed for the want of a little moral courage; but medical men should remember that they owe it to their brethren to do what they can to prevent the establishment of wrong precedents, and be ready to give themselves a little trouble for the good of their profession."

FEMALE LABOUR IN COLLIERIES.

THE movement in favour of the abolition of female labour in collieries does not, it would seem, give general satisfaction among the class which will be chiefly affected by it. At a recent meeting near Wigan a considerable number of persons discussed the changes proposed and entered a protest against them. Among them were 100 pit girls in working dress. This is described as consisting of a closely-fitting black padded bonnet, blue flannel loose jacket with sleeves, dark-blue flannel trousers, dark-blue short skirt with rough apron, and clogs. The subject of female labour was considered at length by the speakers present, and the condition of the pit women reviewed in various aspects. Their muscular development and physique generally were said to be of a superior order, and the advantages of occupation in the open air favourably contrasted with the evils engendered by ill-ventilated workrooms. Domestic life, it was stated, did not suffer from the long daily absence of the women from their homes. On the contrary, this very fact gave an additional charm to household duties in the evening. The use of a modified masculine dress was considered to be decent in itself, and to be justified by necessity. The colliery work was admittedly hard, even harder than was usual or suitable for women, but the want of it would deprive thousands of women of their livelihood: and the agitation which aimed at this result was, the speakers believed, the work of interested trades unionists, and intended solely to increase the wages of pitmen. That this is a one-sided statement of the case is manifest, but it must also be admitted that the arguments used in support of it are not merely specious. It is not to be denied that occupation in the open air is good for women as well as men, and it is only to be expected that muscular strength should be the effect of hard work in such conditions on those who can stand it. The strain encountered in colliery work by women is, however, allowed, even by the advocates for their continued employment, to be unduly severe, and the attendant circumstances are certainly better avoided if possible. The dress cannot, indeed, be blamed as conspicuously indecent, but few persons would regard it as becoming or womanly. This is, no doubt, to some extent a matter of sentiment, and we have therefore no wish to magnify its importance in the face of direct advantages with regard to warmth and ease of movement. It is, however, only one of many circumstances in a masculine calling which must tend to obliterate the right and natural degree of character-distinction between the sexes, to the injury of home life. Women in the northern coal districts do not seem to feel the want of work at the pit mouth. There is no reason to suppose that their Lancashire sisters will ultimately suffer if deprived of it. At the same time it is only fair that custom and the state of trade should be considered by the authorities in making this change, and that the transference of the women's work to men should be a gradual process.

THE ISLINGTON MEDICAL SOCIETY: MULTIPLE PHLEBITIS.

AT the Islington Medical Society on Tuesday, Dr. Morison gave the details of an interesting case of multiple phlebitis, or, as he properly suggested, multiple thrombosis. The patient was a gentleman of temperate habits, with no history of ague or syphilis, gout, or other constitutional disease. There was no other permanent disease to be detected, though in the course of his illness, which extended over two years, he had two attacks of pleurisy. No post-mortem examination was allowed. The urine was of ordinary specific gravity, and free from albumen and sugar. The affection occurred in both legs and arms, and finally gave rise to striking varicosity of the veins of the abdomen. Two or three curious symptoms deserve special notice. One was a swelling of the uvula, with considerable oozing hæmorrhage from it. Another was deep melancholia, produced by the long and, as it proved, incurable persistence of the disease in spite of all sorts of remedies, which led to an almost suicidal refusal of food. Not the least striking feature of the case was the constantly subnormal temperature of the patient. Generally his temperature was 97°; but for two or three days before death Dr. Morison found it much lower. He was careful in his observations of this point. On Aug. 5th, 1882, the patient starving, it was 94°. On the 6th he took some food, and it rose to 96°. On the 7th the breath was cold, and the temperature in the rectum 91°; the intellect clear; pupils normal or slightly contracted: heart's action regular. On the 8th, at 8 P.M., death took place. The pulse, too, was slow (under 70), and there was but little tenderness in the affected veins. Such facts confirm the justice of the view that regards thrombosis as not a mere inflammatory affection of the veins, but rather a blood disease. Even when the patient had his attacks of pleurisy his temperature was only 100°. At the same meeting Dr. Stokes gave particulars of a case of scirrhus of the left chest in a girl of eighteen, which simulated pleurisy so closely that she was twice tapped, without much relief.

SURGICAL TREATMENT OF BRONCHIECTASIS.

THE valuable paper contributed by Dr. C. T. Williams and Mr. Rickman Godlee to the Royal Medical and Chirurgical Society provoked considerable discussion, and may be regarded as marking a decided step in advance in the surgical treatment of suppurative disease of the lung. From our report it will be seen that the following features were the main topics of discussion. All the speakers commented on the difficulty of diagnosing bronchiectasis, and special stress was laid by Drs. Goodhart, Barlow, and Coupland on the difficulty that offered when a bronchus was totally obstructed. Under these circumstances the absence of breath sound, loss of vocal fremitus, and almost absolute dulness gave a decided clinical resemblance to effusion into the pleura; and in most of the illustrative cases the diagnosis was only made at the post-mortem examination. Most speakers concurred in the difficulty of forming any positive conclusion as to the existence of pleural adhesions. The majority of those who joined in the discussion argued that the most favourable cases for operation were not those of simple bronchiectasis, but those in which there was added a fibrosis or chronic pneumonia around the bronchial dilatation. Indeed the authors of the paper considered that simple multiple bronchiectasis was not likely to be relieved by paracentesis. Other centres of interest were the question of danger from hæmorrhage and the best method of exploring to discover the site of the bronchial dilatation. Sir Andrew Clark believed that the reason why hæmorrhage was slight in operations in such cases was because, fibrosis being generally present, the arteries were also sclerosed and their

calibre diminished. The argument is perhaps supported by the freedom from hæmorrhage in some cases, but it might be urged that a sclerosed vessel would be more likely to remain patent, contraction of the middle coats being prevented. That danger may arise from hæmorrhage was testified to by Mr. Godlee and Mr. Gould, who also spoke on the value of an aspirator in the detection of the situation of cavities.

FOOTBALL.

IT is pleasant to have to chronicle under this heading some items less sombre than the usual ones of contusions, fractures, and deaths. The Rugby Union and the Football Association—who differ much, at least so far as the game of football is concerned—on Saturday last entered into praiseworthy combination in the cause of charity. During the afternoon representative matches were played at the Oval in the presence of the Prince of Wales and many thousand spectators. In the evening a smoking concert was held in the principal room of the Holborn Restaurant, a varied and capital entertainment being provided and enthusiastically received by a crowded audience. This "charity festival" will probably result in a substantial sum being left at the disposal of the promoters, who announced that the festival was to be held "on behalf of the London charities." This is comprehensive, if a little vague. We heard it rumoured, however, that the greater part of the sum raised was likely to go to King's College Hospital in response to the recent appeal. Be that as it may, we trust that the hospitals, which are very noticeable "London charities," and just now sadly in want of funds, will not be forgotten. We are glad to see that the president of the Football Association, Major Marindin, was at the recent general meeting of that body successful in passing the following new rule: "No player shall wear any kind of projection on the soles or heels of his boots, with the exception of flat leather bars, to be arranged in accordance with patterns approved by the committee." Any measure calculated to diminish the present painfully frequent occurrence of accidents must be warmly welcomed. It is interesting to note that the representatives of Guy's have this year been successful in both the Rugby Union and Association inter-hospital cups.

AMENDMENT OF SANITARY LAW.

THE Association of Public Sanitary Inspectors have issued a report emanating from their council, in which they plead for greater power, greater responsibility, and increased emoluments. They point out that the sanitary inspector should initiate proceedings on behalf of the local authority for the abatement of nuisances, and should not await the instructions of the authority for this purpose. As a matter of fact, in some districts this course is already adopted, and is found to work well; in others, where there is closer adherence to the formality of the law, a preliminary or informal notice is served by the inspector, and this, in cases where the first notice is disregarded, is followed by a legal notice signed by the clerk to the authority. This is perhaps the most satisfactory method of overcoming the difficulty created by the law requiring that the local authority should institute proceedings. Sanitary authorities rarely meet more often than once a fortnight or once a month, and it is distinctly prejudicial to the public health if no notices are served until after instructions have been given for this purpose by the authority to its officer. Under the Food and Drugs Act the authority appoints its officer to act as purchaser, and upon the purchaser devolves the duty of instituting proceedings where food or drugs submitted to the analyst are found to be adulterated. It was obviously not the intention of those who drafted the Act that the authority should interfere with the officer so long as he performed his duties faithfully, but in practice authorities often decide in every case whether offenders shall be prosecuted. We fear, therefore, that the Association of Public Sanitary Inspectors, even if the law put them in the same position as the purchaser under the Food and Drugs Act, would not be materially benefited by this change. Local authorities have it in their power, and frequently exercise that power, to deprive the sanitary inspector of all freedom of action, and would doubtless continue to do so were the law amended in the manner indicated; but if local authorities were improved, much good would come from an alteration in the position of sanitary inspectors. Another desirable modification of existing law is pointed out in the report: it is of frequent occurrence that when proceedings are instituted with regard to neglect to carry out an order of a local authority, either a nominal fine is inflicted or no punishment whatever is awarded. The report recommends that the minimum penalty should be specified in every Act, and that it should thus be rendered impossible for magistrates to permit offenders who have been convicted to escape without punishment. We are glad to see the sanitary inspectors showing in so marked a way a proper appreciation of the value of their work.

IMPORTANT DISCOVERY OF RARE METALS.

THE necessity for minute accuracy in chemical analysis has just been illustrated in an important discovery by Dr. Strohecker of Frankfort. Somewhat extensive diluvial deposits of brick clay exist at Hainstadt, near Seeligenstadt. The bricks made from this clay vary considerably in colour, according to the temperature at which they are burnt, but the cause of the variation has never before been suspected. It now appears that the layers of this clay are singularly rich in several metals hitherto very scarce, particularly cerium, glucinum, lanthanum, didymium, and yttrium. The first two of these metals are present in such quantities that a more abundant supply may be expected. Ceria, in the form of hydrate, constituted 9·4 and 13·4 per cent. of the clay in two layers analysed, and the colour of the bricks seems to be mainly determined by its presence, for the quantity of iron present was very small. The discovery is therefore of immediate value, and will doubtless lead to further researches on the elements, which may prove to have much more importance in the economy of nature than has been supposed. It is evident that we must not neglect these little-known elements, for, apart from their scientific interest, we cannot tell what undiscovered uses may lie in them. We do not know, indeed, whether they are really as scarce as has been supposed.

VEXATIOUS LITIGATION IN THE UNITED STATES.

A MEDICAL MAN in New York has been mulcted in the sum of 500 dollars for erroneously reporting a case of small-pox, and thus "starting the machinery" by which it was sent to the small-pox hospital; and two Philadelphia medical men have recently been successfully sued for damages by a patient whom they certified, negligently as it was asserted, to be insane, and so were the means of placing in confinement. Such facilities for vexatious litigation exist in the United States that, according to the *Medical News*, "there is much hesitation on the part of physicians to furnish a certificate of insanity, even in cases in which in their judgment it clearly exists. Some positively decline, while others do not act until the disease is so manifest that an average juryman may come to a conclusion. A procedure ostensibly intended to protect the sane may in its practical operation become the means of doing injustice to that class of the insane whose only hope of recovery is

treatment in the early stage, and before decided changes and chronic conditions have become permanently established." An opinion is further expressed, which is as applicable to the existing state of things here as across the Atlantic, that some further legislation is required to protect medical men from vexatious litigation, or that the courts should clearly define and determine their rights, privileges, and exemption from responsibility.

GUSTAVE FLAUBERT.

THE publication by M. French Sheldon of an English version of Salammbô has once again opened the question of Flaubert's professional status. It has been assumed from internal evidence afforded both by this realistic work and by the fragments of the "Temptation of St. Anthony" that Flaubert was a medical man; but this common belief is, we are convinced, founded on a misconception. Both his father and brother were well-known surgeons—a circumstance which probably suggested the remark made by Sainte Beuve, in criticising the works of Gustave Flaubert, that the author handled his pen with as much facility as "the others" handled the scalpel. The father was for nearly thirty years one of the surgeons of the Hôtel Dieu at Rouen, and was the author of a well-known text-book on Surgery, besides several papers on the Treatment of Wounds. Gustave, who had a passionate admiration both for his father and his elder brother, commenced the study of medicine, and so acquired some knowledge both of anatomy and physiology; but he soon abandoned his scientific studies, and devoted his attention to literature and the production of those realistic works of art with which his name will always be associated.

THE ACADEMICAL COSTUME OF MEDICAL MEN.

IT may have occurred to many, as it undoubtedly occurred to some, of our readers who were present at the Royal ceremony on the Embankment on Wednesday last, that the occasions on which medical men appear in public in academical or any other characteristic costume are remarkably few. The clergy display their hoods every Sunday, and as a matter of fact are popularly held to be almost monopolists of academic distinction. We are not of those who attach very great importance to the setting of a good picture, but it certainly is possible that the throwing aside of all class and professional marks of distinction has the drawback that a profession which in fact, even more than in name, is emphatically a "learned" one, has ceased to command that respect in the eyes of the community at large to which it is unquestionably entitled.

TUBERCULOSA VERRUCOSA CUTIS.

THE well-known intractable inflammatory patches on the hands of those engaged in making examinations of dead bodies is attracting considerable attention at the present time. Dr. Wilks described them in 1862 under the name Verruca necrogenica, and attributed them to the constant irritation of the skin from the acridity of the morbid fluids of the dead body, but he did not notice any systemic infection. In France, where this condition is known as the "tubercule anatomique," some of the Hôpital St. Louis physicians, such as Besnier and Vidal, have long suspected their tubercular nature; and Tscherning, Merklen, Karg, and others have reported cases where subcutaneous nodosities developed up the arm with implication of the glands, followed by tubercular infiltration of the lungs. In the discussion of Verneuil's case it was related that Laennec carried one of these warty patches for some years, and eventually died of tuberculosis. In the last issue of the *Vierteljahreschrift Für Dermatologie und Syphilis*, a number of cases of these patches are collected by Drs. Gustav Riehl and Richard Paltauf under the title of Tuberculosis verrucosa cutis. Some beautiful plates are appended showing their histological structure, resembling lupus, though more superficial and containing more numerous bacilli. It does not appear that any of Riehl's cases were followed by tuberculosis of the lungs.

"THE LAW AND THE LUNATIC."

THERE have been digests and commentaries without number called forth by the long-persisting agitation for reform of the Lunacy Laws; but a paper read before the Statistical and Social Inquiry Society of Ireland on Jan. 19th last, and since issued in the form of a pamphlet, seems to us to have the strongest claims on the attention of the profession and the Legislature. The *résumé* is admirably done, and the suggestion with a view to the provision of Observation hospitals, or, better still, Observation wards, in connexion with general hospitals, is on the same lines with the scheme we propounded in these columns in 1875-6, and which was submitted by our commissioner, Dr. Mortimer Granville, to the Select Committee of that date. We commend Dr. George Sigerson's *brochure*, "The Law and the Lunatic," to the attention of our readers.

AMENDMENT OF THE MEDICAL ACTS.

IT is still the intention of the Government to introduce a Bill to Amend the Medical Acts, in the sense of requiring full qualification in the three branches of the profession as a condition of registration; of giving direct representation to the profession, &c. It would of course be altogether premature to discuss the question now. But if Parliament survives the rocks ahead we may hope soon for the introduction of the Bill, and we shall then offer such criticisms on it as it may seem to require.

NEUROLOGICAL SOCIETY OF LONDON.

DR. HUGHLINGS JACKSON delivered, in the capacity of President of the new Society, an inaugural address at the National Hospital for the Paralysed and Epileptic on Wednesday last. The chief object of the address was to show the wide extent of neurology as it is to be studied by the Society. The address teems with most valuable suggestions in the various departments of neurology. A vote of thanks to the President for his address was proposed by Dr. Burdon Sanderson and seconded by Dr. Bristowe.

ARTIFICIAL COCAINE.

MERCK is said to have prepared cocaine by synthesis. Cocaine is benzoic methylecgonine. Benzoic ecgonine is treated with iodide of methyle in slight excess, in the presence of methylic alcohol at 100° C.; the excess of iodide and methylic alcohol is driven off by heat; from the resulting syrupy liquid cocaine is extracted. This artificial cocaine melts at 98° like its prototype, and it possesses all the reactions of the natural product.

ROUGH PITCHING IN LONDON STREETS.

IT is strange that, notwithstanding the improvements which have been effected in the paving of roadways generally throughout the metropolis, street-crossings and the little carriage-ways leading to private houses should have been almost uniformly neglected. In walking down the right side of Piccadilly from the circus—that was—to Hyde-park-corner, the pedestrian has to cross some thirty of these agonising bits of rough pitching, and if he happen to wear thin boots or to labour under the miserable disadvantage of tender feet he will not fail to execrate the perversity of the

public or private authorities by whose neglect he is tortured. There surely need be no great difficulty in finding a remedy for this nuisance.

A MOST DISGRACEFUL HOAX.

A LETTER appeared in the *Daily Telegraph* of Thursday, from Mr. C. L. Todd, Secretary to St. George's Hospital, saying that a cheque for £1000, the receipt of which had been acknowledged in that paper on the previous day, had been returned unpaid, marked, "No account." We do not envy the practical joker whose sense of humour is gratified by such unfeeling and very foolish conduct.

ON the 18th inst. the death occurred, after a short illness from acute pneumonia, of Mr. John Fremlyn Streatfeild, F.R.C.S., senior surgeon to the Royal London Ophthalmic Hospital, ophthalmic surgeon to University College Hospital, and Professor of Clinical Ophthalmic Surgery in the College. Mr. Streatfeild received his professional education at the London Hospital, and became a member of the Royal College of Surgeons in 1852. He was employed during the Crimean War as an assistant-surgeon to the British Hospital at Smyrna; but on his return to England devoted himself entirely to ophthalmic surgery, in which he attained a considerable reputation. He obtained the Fellowship of the College of Surgeons in 1862, and made various contributions to the literature of his department of practice. We hope in an early number to give a more detailed account of his life and work.

WE are requested by the Registrar of the Royal College of Physicians to state that he desires to express his regret should any letters addressed to him on the subject of the ceremony which took place on the 24th inst. not have been answered, his excuse for such apparent want of courtesy being the great increase of correspondence which that ceremony occasioned.

AN election for a curator of the museums of the Royal College of Surgeons in Ireland was held on Thursday, the 18th inst., when the Council appointed Dr. Alexander Baillie McKee to the post, at a salary of £250 a year. Dr. McKee is a graduate in Arts and Medicine of the University of Dublin.

THE Dublin Hospitals Inquiry Commission, having completed the task of receiving evidence, has, we learn, commenced to prepare its report, which will probably be ready for presentation to Parliament in the course of three or four weeks.

PROFESSOR GERHARDT, of Berlin, has had the misfortune to break his arm through his foot slipping when getting out of a railway carriage at the Central Railway Station in Berlin.

MR. PETER C. LITTLE, F.R.C.S.I., died last week at his residence in Amiens-street, Dublin, after a lingering illness, aged fifty-three years.

NATIONAL HEALTH SOCIETY.—The success attending the comprehensive course of Health Lectures recently delivered at Bayswater by Dr. Schofield has encouraged the National Health Society to commence a similar course at the Town Hall, Kensington, to be inaugurated by H.R.H. Princess Christian on Wednesday, March 31st. The subjects of general health, causes of diseases, dress, food, and home nursing will be treated in turn. The Health Lectures will be followed by ambulance classes, in which practical instruction will be given in nursing, first aid in accidents, bandaging, and stretcher drill.

OPENING OF THE NEW MEDICAL EXAMINATION HALL BY THE QUEEN.

ON the 24th inst. the Queen gave evidence of the interest which she has ever taken in the progress in her realms of the medical profession—a profession on which the prosperity, as gauged by the health, of her subjects is so largely dependent, by attending in semi-state to lay the foundation-stone of the new building upon the Embankment, which the ancient Corporations of Physicians and Surgeons are erecting for the purpose of a conjoint Examination Hall. Encouraged by the bright and warm sunshine weather, in such glaring contrast to that experienced during the last few weeks by residents in the metropolis, spectators began to line the route of Her Majesty's progress at an early hour of the morning, although the ceremony was not arranged to take place until after noon.

The site of the proposed building lies within the precincts of the Savoy, and at this place the band of the Scots Guards were stationed and played at intervals whilst the guests were arriving, amongst whom were the Duke of Northumberland, Earl Spencer, the Lord Chancellor, Lord Granville, Sir Lyon Playfair, the Lord Mayor, the Deans of St. Paul and Westminster, Sir John Lubbock, and Canon Duckworth. The site was covered with a marquee, which was very handsomely and effectively decorated for the occasion. The Embankment front was lined out to the full extent of the frontage of the new building with Venetian masts bearing floating banners and tasteful trophies of flags, triplicate. The Royal entrance, which was at the eastern end of the marquee, was made charming with flowering plants and Indian tapestry artistically disposed; while above it was a flagstaff, from which, in due course, the Royal Standard was displayed. In the interior was a handsome arcade in crimson and gold, supported by columns clothed with ferns, which led to the Royal seat and the foundation-stone. Around this special scene of the ceremony a horseshoe-shaped enclosure, slightly rising in the rear, covered with crimson cloth, bore a number of chairs for the high officials of the two Colleges. Behind this enclosure the remaining area of the marquee was laid out as an amphitheatre rising in tiers of benches, each numbered, for the reception of the general visitors, and the interest shown in the ceremony was evidenced by the fact that by 11.30 almost every one of these seats was occupied. Soon after the arrival of the guard of honour, which consisted of a company of the 3rd Battalion of the Grenadier Guards, a company of the Medical Staff Corps, and a company of the Artists' Volunteer Corps, at noon the officials of the two Colleges arrived upon the scene in accordance with the programme given in our last issue. Shortly afterwards the Prince of Wales, the Duke of Cambridge, the Princess Louise, the Marquis of Lorne, the Duke of Abercorn, the Archbishop of Canterbury, the Prince and Princess Christian, and the Duke of Connaught arrived, and waited the arrival of the Queen. At 12.30 a burst of cheering from the crowd outside announced the approach of Her Majesty, who, attired as usual in black, was met at the entrance of the marquee by the Royal group, the Chancellor of the Exchequer, the Chancellor of the Duchy of Lancaster, and by the Presidents of the two Colleges. Sir William Jenner and his colleague, Mr. Savory, led the way to the dais, where Mr. Childers and Mr. Engleheart, the Clerk of the Council of the Duchy, were waiting to receive Her Majesty, and lead her to her chair of state. Directly this duty had been performed, and the cheering had subsided, the choir of the Chapel Royal, Savoy, sang the National Anthem, the assembly joining in unison with admirable effect. A prayer, taken chiefly from the prayers of Francis Lord Bacon, a circumstance which accounted for the quaint-

ness of the language, was then offered by the Archbishop of Canterbury, and the choir afterwards intoned the Lord's Prayer and sang a hymn.

Mr. Savory, with Sir William Jenner standing by his side, then read the following joint address of the two Colleges:—

"We, the Royal College of Physicians of London and the Royal College of Surgeons of England, who owe our foundation to Royal favour, and to whom for many years the responsible duty of granting diplomas in Medicine and Surgery has by Royal Charter been entrusted, with a view to the further advancement of medical and surgical education, have recently combined for the purpose of establishing joint examinations in Medicine and Surgery and the science on which they are founded. We hope by this means not only to remove many of the existing difficulties in the way of students, but also to render the examinations more complete and satisfactory. And in order to promote the convenience and efficiency of this important step, we have undertaken to erect this hall, in which the examinations will be conducted, and which will be entirely devoted to that purpose. We cannot but regard it as a happy omen of the future success of this undertaking that your Majesty has been graciously pleased to inaugurate this good work by your Majesty's presence here to-day. And we desire to express to your Majesty our grateful sense of the distinction which has been thereby conferred on the two Colleges and the profession. In witness hereof we, your Majesty's loyal and dutiful subjects, have caused our common seals to be hereunto affixed this 24th day of March, 1886."

To this Her Majesty, in a clear but low voice, replied:—

"I thank you for your loyal address. It is with sincere pleasure that I lay the foundation-stone of the building which you propose to erect. I cordially concur in the hope which you have expressed, that this undertaking—in which I take a deep and personal interest—may largely contribute to the further advancement of medical and surgical education. The establishment of this hall is mainly due to the efforts you have made in conjunction with the President of the Royal College of Physicians, with whom I have been long personally acquainted, and whose eminent abilities and far-seeing knowledge have justly placed him in the foremost rank of those who have benefited mankind.' (Great cheering).

Her Majesty then placed with her own hands a number of documents relating to the Colleges of Physicians and Surgeons, copies of THE LANCET, *The Times*, and *Morning Post*, and some coins and medals, in two glass jars, which were fitted into a cavity in the bed of the stone. An enamel photograph of Her Majesty, by Mr. A. L. Henderson, was, with her approval, also deposited in one of the jars. An elegant silver gilt trowel, appropriately inscribed, designed, and manufactured by Messrs. Hancock and Co., of New Bond-street, was then handed to Her Majesty by Mr. Stephen Salter, and the stone, which bore the following inscription, was lowered to its bed:—

VICTORIA,
Queen of Great Britain and Ireland,
Empress of India,
Laid with her own hand
This Stone.
24th March, 1886.

Her Majesty then gave the stone three taps with a black ebony mallet, which was handed to her for the purpose, and declared it well and truly laid, amid the loudest and most enthusiastic cheering.

The following gentlemen were then presented to Her Majesty by Sir William Jenner, Bart.:—The President of the Royal College of Surgeons, William Scovell Savory, Esq., M.B. Lond., F.R.C.S., F.R.S.; the Senior Vice-President of the Royal College of Physicians, Edmund Lloyd Birkett, Esq., M.D. Cant., F.R.C.P.; the Senior Vice-President of the Royal College of Surgeons, John Wood, Esq., F.R.C.S., F.R.S.; the Junior Vice-President of the Royal College of Physicians, John William Ogle, Esq., M.D. Oxon., F.R.C.P.; the Junior Vice-President of the Royal College of Surgeons, Henry Power, Esq., M.B. Lond., F.R.C.S.; the Treasurer of the Royal College of Physicians and Chairman of the Building Committee, Dyce Duckworth, Esq., M.D. Edin., F.R.C.P.; the Registrar of the Royal College of Physicians, Sir Henry A. Pitman, M.D. Cant., F.R.C.P.; the Architect of the Examination Hall, Stephen Salter, Esq., F.R.I.B.A.

The Archbishop of Canterbury then pronounced the benediction, and Sir W. Jenner having had the honour of kissing Her Majesty's hand, the Royal party retired.

Seldom, if ever, has her Majesty's appearance in public been more auspicious, and rarely has she performed a more gracious act, and one which we are sure will endear her more to the hearts of an appreciative people.

PASTEUR'S METHOD IN HYDROPHOBIA.

MANY of our readers are unacquainted with the method adopted by Pasteur for the prevention of the development of hydrophobia; to meet their requirements we publish the following information. If a piece of spinal cord from a rabid street dog be placed under the dura mater of a rabbit, by trephining, rabies will develop in the rabbit after an average period of incubation of about fifteen days. If the virus from this first rabbit be transmitted to a second, and from the second to a third, and so on by the same method of inoculation, it is soon found that the rabies becomes more and more pronounced, and the period of incubation becomes shorter and shorter. After the transmission through twenty or twenty-five rabbits the period of incubation is eight days, and at this point it remains for a fresh period of twenty-five transmissions. Then at the end of the fiftieth inoculation the incubation period is seven days. These results were found to be perfectly invariable, and the experiments begun in 1882 have been continued ever since. Consequently nothing is more easy than for the operator to have constantly by him during intervals of considerable duration a virus of rabies of perfect purity, and always perfectly identical, or as nearly so as possible. This is the practical point in the method. The spinal cords of these rabbits are "rabid" throughout their extent with a constant degree of virulence. If from one of these cords a certain length be removed with all proper antiseptic precautions and be suspended in dry air, the virulence slowly disappears in the spinal cord until it is extinguished. The time that elapses before extinction varies a little with the thickness of the pieces of cord, but more especially with the temperature of the environment. The lower the temperature, the longer is the virulence preserved. These facts constitute the scientific point in the method. It is interesting also to observe that if the rabid spinal cord be kept in carbonic acid gas in a moist state, its virulence is preserved, at least for many months, without any variation, provided it is kept free from foreign microbic alteration. These facts being understood, the following is the method of rendering a dog refractory to the development of rabies. In a series of flasks, in which the air is kept dry by means of fragments of potash deposited on the bottom of the vase, is suspended every day a portion of a rabid cord fresh from a rabbit dead of rabies—of rabies developed after seven days' period of incubation. Every day a syringeful of sterilised bouillon is injected under the skin of the dog—of bouillon which has been mixed with a small fragment of one of the spinal cords undergoing desiccation, a cord being commenced with which is not in a too virulent state, and therefore one which has been suspended a few days before being used. Previous experiments of course enable these details to be ascertained. The following days still more recent cords are used, separated by an interval of two days, until a time is reached when a very virulent cord is used—one that has been placed only a day or two in the flask of dry air. The dog is then completely protected. "You may then inoculate it with the most powerful virus,

either under the skin or, by trephining, on the surface of the brain without its ever getting rabid." By the application of this method Pasteur was able to obtain fifty dogs of all ages and all varieties perfectly refractory to rabies, without a single failure, when unexpectedly there presented themselves at his laboratory on Monday, July 6th, 1885, three individuals from Alsace—Theodore Vone, Joseph Meister, and his mother. At Pasteur's invitation M. Vulpian and M. Grancher paid a visit to the boy Joseph Meister, on whom they found fourteen wounds that had been inflicted by a dog which was regarded as incontestably rabid. The life of Joseph Meister was despaired of, and so it was agreed that he should be made the subject of an experiment similar to those by which Pasteur's dogs were rendered refractory to the virus of rabies. On July 6th, at 8 P.M., sixty hours after the infliction of the bites by the rabid dog, in the presence of MM. Vulpian and Grancher, under a fold of skin of the right hypochondrium M. Pasteur inoculated half a syringeful (Pravaz) of bouillon containing a fragment of a spinal cord of a rabbit, dead on June 21st, and preserved in a flask of dry air, consequently a cord that had had its virulence diminished by fourteen days' subjection to the necessary influences. The following days fresh inoculations were made, always in the hypochondriac regions:—

July	7th, at	9 A.M.,	half a syringeful of a cord kept	14	days
"	7th "	6 P.M.	" "	12	"
"	8th "	9 A.M.	" "	11	"
"	8th "	6 P.M.	" "	9	"
"	9th "	11 A.M.	" "	8	"
"	10th "	"	" "	7	"
"	11th "	"	" "	6	"
"	12th "	"	" "	5	"
"	13th "	"	" "	4	"
"	14th "	"	" "	3	"
"	15th "	"	" "	2	"
"	16th "	"	" "	1	"

Corresponding experiments were made on rabbits by trephining so as to gauge accurately the degree of virulence of the cords used. It appeared that the cords used on July 6th, 7th, 8th, 9th and 10th were not virulent, for the rabbits inoculated with them remained free from rabies; but the cords of the 11th, 12th, 14th, 15th and 16th were all virulent and increasingly so, the rabies in the rabbits appearing after a period of seven days' incubation with the cords used on the 15th and 16th. When the condition of immunity is attained the virulent virus may be inoculated and in any quantity without any result.

MORTALITY AND VITAL STATISTICS OF THE UNITED STATES.

THE Census Office of the United States has recently issued the eleventh volume of the Report upon the Census of the United States in 1880. It is a quarto volume of nearly 800 pages, constituting Part I. of a special report on the Mortality and Vital Statistics of the United States in 1880, by Dr. John S. Billings. The United States "has no system of registration of vital statistics such as is relied upon by all other civilised nations," and in default of such a system attempts have been made at each of the last five national censuses to collect, through the agency of the enumerators, data with regard to the births and deaths that occurred during the year preceding the date of each census. Such attempts have been made in Ireland and in other countries prior to the establishment of civil registration. The result of such attempts has invariably been to prove the impossibility of collecting complete or trustworthy data by such a method. Dr. Billings freely admits that "the experience of the United States census furnishes no exception to this rule." It is acknowledged that the enumerators do not ascertain and record more than from 60 to 70 per cent. of the actual number of deaths. With such a preliminary admission as to the nature of the facts dealt with, it may well be doubted whether the elaboration of the bulky volume of tables under notice can be statistically justified. Dr. Billings' introductory remarks, however, which occupy nearly forty pages of the volume, call for notice, and are valuable for the results he has been able to deduce from these imperfect census data bearing upon the comparative healthiness of the United States, and the relative mortality from different forms of disease in different parts of the States. In the concluding paragraph of his introductory and explanatory remarks Dr. Billings says:—"As a general rule, it may be said that the figures given in these volumes are more valuable for suggesting inquiries than for answering them, yet the more I compare them with those of other countries the more I have become satisfied that they are valuable for both purposes if properly used."

The deaths recorded and tabulated for the year of observation preceding each of the last three censuses were equal to a death-rate of 12·54 per 1000 in 1860, 12·77 in 1870, and to 15·09 in 1880. This apparent increase in the death-rate in 1880 is attributed to the success of efforts made in the last census to obtain more complete returns of the deaths than had been the case at the two preceding enumerations.

In order to measure the extent of deficiency in the number of deaths returned by the enumerators at the last census, their returns for the State of Massachusetts (excluding the city of Boston), and for the whole State of New Jersey, were compared with the records furnished from the State registration offices, the total deficiency in which is considered not to exceed 2 per cent. The result of this comparison is to show that the deficiency in the enumerators' returns was 26·6 per cent. in Massachusetts (excluding Boston), and 36·5 per cent. in New Jersey. "The deficiency was greatest among the deaths of infants, of females, and of foreigners, and increases in a tolerably uniform ratio for each month of the year, going backward in time from the date of the census, and was greatest in the thinly settled sections of the country."

With a view to correct this important deficiency in the number of deaths reported by the enumerators, a register form was sent early in the census year (which ended on May 31st, 1880), with a stamped envelope for its return at the end of the year, to everyone in the United States who was reported by his or her postmaster to be a physician, or to be addressed as such. It was requested that the particulars of all deaths occurring during the year under observation within the knowledge of the medical practitioner might be entered in these registers before they were returned. The number of these registers sent out was 70,299, of which only 25,809, or 37 per cent., were returned. The registers' report returned to the census office contained records of 166,896 deaths, of which 61,020, or 36·6 per cent., were found not to have been reported by the enumerators. Even after the correction of the enumerators' returns for Massachusetts and New Jersey by the addition of the cases obtained from the physicians' registers, the new numbers, compared with the numbers furnished by the State registration offices, still showed a deficiency of 13·3 per cent. for Massachusetts, and of 20·1 per cent. for New Jersey. Dr. Billings assumes that after the addition of the deaths proved by the physicians' registers that came to hand to have been omitted, the returns of the enumerators were "still deficient as much as 30 per cent.," which is believed to be the maximum. The result of this rough estimate is stated to be to raise the average annual mortality for the whole country from 15·09, as shown by the uncorrected enumerators' returns, to 18·08 per 1000. It may be noted, however, that if the uncorrected rate (15·09) be raised by 30 per cent., the corrected rate would be 19·62. Dr. Billings on this point concludes that "it seems safe to assume that the death-rate was not less than 17 nor more than 19 per 1000 of the living population, and I shall assume the mean of these—viz., 18 per 1000—as the mortality rate of the United States during the census year."

The grounds upon which Dr. Billings concludes that the maximum deficiency of the corrected death returns is 30 per cent. should be referred to. The recorded mortality during the census year in thirty-one American cities in which the registration records of death is "presumed to be fairly accurate" gave a death-rate of 22·28 per 1000; and as the mortality of such cities is "usually between 4 and 5 per 1000 greater than the average mortality of a large country, including cities, towns, and rural districts," this is said to increase the probability that the rate in the whole of the United States is not far from 18 per 1000. This argument involves so much assumption that it is of doubtful value. Its validity mainly depends upon the accuracy of the presumption that the death records of these thirty-one cities are "fairly accurate." This may be doubted when it is considered that the death-rate of females in Cincinnati is stated

to be 18·97, in St. Louis 18·23, in San Francisco 17·02, and in Newark 16·49. A further ground for the belief that the deficiency of recorded deaths in the United States did not exceed 30 per cent. is that the deaths of infants under one year in Massachusetts during the census year were equal to 17·05 per 100 births; "if this be taken," says Dr. Billings, "as the true average proportion for the United States, the deficiency in the number of deaths of children under one year would be a little over 34 per cent.," and as the deficiency at this age is known to be greater than at subsequent ages, it is assumed that the total deficiency cannot have been much more or less than 30 per cent., at which Dr. Billings places it. With reference to this line of argument, it is worth pointing out that the recorded facts for the United States show a rate of infant mortality of only 11·10 per cent. of the births, against the 17·05 shown in Massachusetts, and that the value of the comparison depends in great measure upon the approximate accuracy of the record of deaths of infants in the latter State.

Full consideration, therefore, of the various elements of doubt that envelop all the bases of facts upon which Dr. Billings has had to deal, and upon which he has attempted to construct trustworthy mortality statistics, makes it exceedingly difficult to accept his final conclusion that "it will be *seen* that the death-rate in the United States compares favourably with that of all other civilised countries." It may readily be admitted that "since poverty and overcrowding are the chief causes of excessive mortality, and in the United States there is a more general and equable distribution of the means of supporting life, including especially a food-supply of good quality, and more room than in European countries," the death-rate might be expected to be lower than in most of the countries of the old world. We cannot, however, accept Dr. Billings' figures and deductions as affording satisfactory evidence that the death-rate in the United States in the census for 1879-80 did not exceed 18·0 per 1000, although they abundantly prove that any conclusions based upon the recorded deaths, except in a very small section of the States, including mainly a certain number of registration cities, are entirely untrustworthy.

It is matter for international regret that in such essential departments of vital statistics as the registration of births and deaths the United States should be so far behind most other civilised countries. Until, however, some tolerably uniform system for such registration be adopted throughout the States, we much doubt whether, either from a public health or a statistical point of view, the comparison of American and European mortality statistics can yield any useful result.

IRISH MEDICAL SCHOOLS AND GRADUATES' ASSOCIATION.

THE ninth annual meeting of the above Association was held on the 17th inst. (St. Patrick's Day), at 49, Berners-street, the President, Dr. H. Macnaughton Jones, F.R.C.S.I., in the chair. There was a large attendance of members. The report, which extended over a period of less than eight months, was of a most satisfactory character. The number of members had increased since July 29th last—when the eighth annual meeting was held at Cardiff—from 272 to 355. Two members had died during that period—viz., Drs. F. Helen Prideaux and J. J. Jennett. There had been no resignations. The Council hoped that, their senior Vice-President, Dr. Balthazar Foster, being now an M.P., there would be no delay in getting power for the King and Queen's College of Physicians to register its membership and the Royal University of Ireland its degree of M.A.O. No steps had yet been taken to secure rooms for the Association in London, the Council thinking it better to wait till the numbers on the roll had reached at least 500. The balance in the hands of the treasurer was declared to be over £40. On the motion of Professor G. F. Yeo, M.D., Dr. Jones was re-elected President in consideration of his services in connexion with the reorganisation and rapid development of the Association, and also because of the curtailment by the new constitution of the period during which he had held office. Brigade Surgeon W. Alexander, M.D., and W. H. White were elected to the two vacancies on the Council. Dr. James Thompson was re-elected Hon. Treasurer.

The annual dinner took place the same evening at the Holborn Restaurant. Ninety-two members and their friends (the latter including several ladies) sat down. The chair was occupied by the President, who was supported by Sir Spencer Wells, Bart., F.R.S., Sir Joseph Fayrer, K.C.S.I. (Hon. Physician to the Queen), Professor Humphry, F.R.S. (Cambridge), and other guests of the Association. Among the members present were Sir William Mac Cormac (Vice-President), Professor Gerald F. Yeo (Chairman of Council), Brigade Surgeons T. Wright and W. Alexander, Staff Surgeon O'Sullivan, R.N., Dr. S. J. Flood, A.M.S., Dr. Carte (Coldstream Guards), Dr. James Thompson (Hon. Treasurer), and Drs. Daniell and Stewart (Hon. Secretaries).

WILLS OF MEDICAL MEN.

THE Irish Probate, sealed at Dublin, of the will and codicil or scheme of Barnewall Peter White, M.D., late of St. Columbs, co. Londonderry, who died on December 3rd last, granted to Mr. Michael King, one of the surviving executors, was resealed in London on the 2nd inst., the aggregate value of the personal estate in England and Ireland amounting to upwards of £31,000. The testator gives annuities to his wife and his two sisters charged on his Tamlaght estate, in the county of Londonderry; and there are a few other bequests. The Tamlaght estate he devises to the use of his half-brother, Richard White, for life, with remainder to his son, Thomas Earle White, for life, with remainder to his first born and other sons successively according to seniority in tail male. Certain plate, furniture, books, and effects are made heirlooms to go with the estate. His waterside estate in the city of Londonderry, he settles on his half-brother, Thomas White, for life, then on his son, and in default of a son on the said Thomas Earle White. He appoints as his residuary legatee the person who shall succeed to the Tamlaght estate. Should the remainders to the said estates fail, the testator gives them to the Superioress-General of the Sisters of Charity, Dublin, to found an asylum for the families of professional and commercial men, small proprietors and agriculturists afflicted with insanity, whose relatives have insufficient means to pay the usual pension for them in private asylums.

The will of Murdoch Kelburne King, M.D., late of Kingston-upon-Hull, who died on January 2nd last, was proved at the York District Registry on the 22nd ult. by Mrs. Mary King, the widow, the executrix, the value of the personal estate amounting to over £14,000. The testator bequeaths the marble bust of himself to his wife for life, and then to the General Infirmary, Hull; the oil painting of himself, in his mayor's robes, to his wife for life, and then to the Mayor, Aldermen and Burgesses of the Borough of Kingston-upon-Hull in their corporate capacity, and a few other legacies. The residue of his property he leaves as his wife shall appoint.

The will and codicil of Gavin Milroy, M.D., formerly of 30, Fitzroy-square, late of 21, Church-road, Richmond, Surrey, who died on January 11th last, were proved on January 23rd by Mr. Edward Hawes and George Blundell Longstaff, M.B., the executors, the value of the personal estate amounting to over £10,000. The testator bequeaths £1000 each to the National Refuges for Homeless and Destitute Children, and the Asylum for Idiots, Earlswood; £100 each to the British Medical Benevolent Fund and the Medical Missionary Society of Edinburgh; £1743, being the amount received by him in 1872 from the Colonial Office as remuneration for his tour to the West Indies, and a further sum from his estate to make up £2000 in all, to the President and Council of the Royal College of Physicians, to found and continue a yearly lectureship of three lectures on State Medicine and Public Hygiene; the silver cup presented to him by the College for acting as honorary secretary of the Leprosy Committee, and certain papers and books, to the said College; and many other legacies. The residue of his property he leaves to some nieces, the wife of a nephew, and the infant son of a deceased niece.

The will of Edward Christopher Holland, M.D., late of 15, Catherine-place, Bath, who died on January 5th last, was proved on the 10th inst. by Mrs. Anna Holland, the widow, and Mrs. Eliza Henrietta Hartnell, the daughter, the executrixes, the value of the personal estate exceeding

£4000. The only legatees under the will are testator's wife and said daughter.

The will of Joseph Wyatt Crane, M.D., late of Leicester, who died on September 30th last, was proved at the Leicester District Registry on the 19th ult., by Charles Albert Crane, M.D., and Alfred Wyatt Crane, the sons, two of the surviving executors, the value of the personal estate being under £2000. The only legatees under the will are testator's children and his granddaughter, Ethel Crane.

The will and codicil of Frederic Gilder Julius, M.D., late of 4, Portland-terrace, Richmond, who died on January 4th last, were proved on the 8th ult. by Mr. Arthur Onslow Julius, the son, and Mr. William Adolphus Frederick Bateman, the executors, the value of the personal estate exceeding £6000. The testator gives legacies to his sons, the Ven. Archdeacon Julius and Arthur Onslow Julius, and to his daughters, Mrs. Annie Bateman and Miss Mary Caroline Julius; and the residue of his property to all his children in equal shares.

The will of John McGrigor Augustus Thomas Croft, M.D., M.R.C.P., late of 15, Abbey-road, St. John's Wood, who died on Jan. 1st last, was proved on the 22nd ult., by Mr. Harry Smith Styan and Mr. William Henry Biss, the executors, the value of the personal estate amounting to over £2000. The testator leaves all his property, real and personal, to his son, John Bonham Croft.

The following legacies have recently been left to hospitals and other medical institutions:—Mr. George Redford, of Portland-street, Southport, Lancashire, the residue of his real and personal estate to the Southport Infirmary, the Oldham Infirmary, and the Southport Convalescent Hospital, in equal shares.—Mr. William Beale, of Manor House, Stoke Newington, 100 guineas to the Stoke Newington Dispensary, and 50 guineas to the Invalid Asylum at Stoke Newington.—Mrs. Jemima Steuart Barclay, of 1, Gordon Villas, Snells-park, Edmonton, £200 each to the Tottenham Hospital, near High-cross, and the Tottenham and Edmonton General Dispensary, Lower Edmonton; and £100 each to the British Home for Incurables, Clapham, the City of London Hospital for Diseases of the Chest, Victoria-park, the National Hospital for the Paralysed and Epileptic, Queen's-square, Bloomsbury, and the Royal Hospital for Incurables, Putney-heath.—Miss Hannah Domager, of 11, St. James's-square, Bath, £200 each to the Bath Royal United Hospital and the Bath Mineral Water Hospital.—Miss Henrietta Hannah Bult, of 1, Houghton-place, Ampthill-square, £30 each to the Royal Hospital for Incurables, West-hill, Putney, the Royal Free Hospital, Gray's-inn-road, the North London Consumption Hospital, Hampstead, and the National Hospital for the Paralysed and Epileptic, Queen's-square, Bloomsbury.—Mr. James Dorman, of Sandwich, Kent, £100 towards the repairs of the chapel of St. Bartholomew's Hospital, Sandwich, and £15 to the Kent and Canterbury Hospital.—Mr. Richard Towne, of 8, Ormonde-terrace, Regent's-park, £1000 to the National Orthopædic Hospital, Bolsover-street; £300 to the Hospital for Incurables; £200 each to the Cancer Hospital, Brompton, the Hospital for Paralysed and Epileptic, Albert-road, Regent's-park, and the North London Consumption Hospital, Hampstead; and £100 to the Hospital for Sick Children.—Mr. Alexander Bell, of Park-hill, Upper Tooting, £50 to the Hospital for Paralysis and Epilepsy.—Mrs. Mary Gatley Litler, of Wallerscote, near Leamington, Warwickshire, £1000 each to the National Hospital for the Paralysed and Epileptic, Queen's-square, Bloomsbury, and the Royal Hospital for Incurables, West-hill, Putney-heath; £500 to the Warneford Hospital, Leamington; £300 to the British Home for Incurables, Clapham; and £200 to the Convalescent Home, Kenilworth.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 6004 births and 5101 deaths were registered during the week ending March 20th. The annual death-rate in these towns, which had steadily increased in the seven preceding weeks from 22·1 to 28·0, further rose last week to 29·3, and exceeded the rate recorded in these towns in any week since February, 1882. During the first eleven weeks of the current quarter the death-rate in these towns averaged 24·4 per 1000, and exceeded by 0·2 the mean rate in the corresponding periods of the ten years 1876-85. The lowest rates in these towns last week were 18·7 in Norwich, 20·9 in Leeds, 21·0 in Bristol, and 21·3 in Leicester. The rates in the other towns ranged upwards to 35·7 in Manchester, 36·0 in Liverpool, 39·2 in Bolton, and 39·6 in Blackburn. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had been 384, 403, and 430 in the previous three weeks, were 427 last week; they included 195 from whooping-cough, 103 from measles, 44 from diarrhœa, 32 from scarlet fever, 32 from "fever" (principally enteric), 20 from diphtheria, and 1 from small-pox. No death from any of these zymotic diseases was recorded last week in Sunderland, Norwich, or Huddersfield; whereas they caused the highest death-rates in Brighton, Portsmouth, Bolton, and Blackburn. Whooping-cough caused the highest death-rates in Bolton, Portsmouth, and Brighton; measles in Birmingham, Portsmouth, Bolton, and Blackburn; and scarlet fever in Leeds. The 20 deaths from diphtheria in the twenty-eight towns included 14 in London and 2 in Birmingham. Small-pox caused 1 death in Blackburn, and not one in London or in any of the twenty-six other large English towns. The number of small-pox patients in the metropolitan asylum hospitals situated in and around London, which had been 7 on each of the preceding two Saturdays, was again 7 at the end of last week; 2 new cases were admitted to these hospitals during the week, against 0 and 1 in the previous two weeks. The Highgate Small-pox Hospital contained 4 patients on Saturday last, one case having been admitted during the week. The deaths referred to diseases of the respiratory organs in London, which had increased in the preceding eight weeks from 477 to 855, further rose last week to 917, and exceeded the corrected weekly average by 436. The causes of 137, or 2·7 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Portsmouth and Derby; and the largest proportions of uncertified deaths were registered in Halifax, Plymouth Bolton, and Oldham.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had increased from 22·3 to 27·5 per 1000 in the preceding four weeks, further rose to 27·9 in the week ending March 20th, but was 1·4 below the mean rate during the same week in the twenty-eight English towns. The rates in the Scotch towns last week ranged from 17·8 and 19·4 in Leith and Dundee, to 33·0 in Paisley, 33·4 in Greenock, and 33·9 in Glasgow. The 690 deaths in the eight towns showed a further increase of 12 upon the numbers returned in recent weeks, and included 14 which were referred to whooping-cough, 11 to diarrhœa, 10 to measles, 6 to "fever" (typhus, enteric, or simple), 1 to diphtheria, and not one to small-pox; in all, 46 deaths resulted from these principal zymotic diseases, against 43 and 51 in the preceding two weeks. These 46 deaths were equal to an annual rate of 1·9 per 1000, which was 0·5 below the mean rate from the same diseases in the twenty-eight English towns. The fatal cases of whooping-cough, which had been 19 and 20 in the previous two weeks, declined last week to 14, of which 13 occurred in Glasgow. The 11 deaths attributed to diarrhœa corresponded with the number in the previous week, and included 4 in Glasgow and 3 in Edinburgh. The 10 deaths from measles showed a further increase upon the numbers in recent weeks, and included 8 in Edinburgh and 2 in Leith. The deaths referred to "fever," which had been 7 and 4 in the previous two weeks, were 6 last week, of which 2 occurred in Glasgow and 2 in Greenock. Three of the 4 fatal cases of scarlet fever were returned in Glasgow. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had steadily increased in the preceding six weeks from 135 to 191, further rose last week to 204, and exceeded the number in the corresponding week of last year by no fewer than 80. The causes of 85, or more than 12 per cent., of the deaths in the eight Scotch towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 30·1 and 38·3 per 1000 in the preceding two weeks, further rose to 40·5 in the week ending March 20th. During the first eleven weeks of the current quarter the death-rate in the city averaged no less than 33·4 per

1000; the mean rate during the same period did not exceed 24·9 in London and 19·6 in Edinburgh. The 274 deaths in Dublin last week showed a further increase of 15 upon the number returned in the previous week, and included 13 which were referred to the principal zymotic diseases, against 15 and 19 in the previous two weeks; 6 resulted from whooping-cough, 6 from "fever" 1 from diarrhœa, and not one either from small-pox, measles, scarlet fever, or diphtheria. These 13 deaths were equal to an annual rate of 1·9 per 1000; the rates from the same diseases being 2·7 in London and 2·9 in Edinburgh. The fatal cases of whooping-cough, which had been 18, 10, and 11 in the preceding three weeks, further declined last week to 6. The 6 deaths referred to "fever," on the other hand, corresponded with the number in the previous week. Eight inquest cases and 6 deaths from violence were registered; and 84, or considerably more than a quarter of the deaths, were recorded in public institutions. The deaths of infants and of elderly persons showed a further increase upon recent weekly numbers. The causes of 45, or 16 per cent., of the deaths registered during the week were not certified.

Correspondence.

"Audi alteram partem."

CYCLIC ALBUMINURIA.

To the Editor of THE LANCET.

SIR,—I consider Dr. Saundby does not render himself justice in saying that no one has remembered his communication on albuminuria published in the *British Medical Journal* in June, 1880. I for one am familiar with what he has written, and even referred to it only a few weeks ago. The observations to which he has directed attention are almost identical in nature with some I conducted on two cases of Bright's disease eighteen years previously. They were brought forward in my Gulstonian Lectures delivered in 1862 and published in THE LANCET for 1863 (vol. i., p. 575).

Dr. Saundby contends that I am wrong if I assert that the diurnal variation to which I have drawn attention is absent in Bright's disease and present only in my cases, and he speaks of my having classified the cases as "cyclic" on the ground that the maximum amount of albumen of the twenty-four hours is found during the after-breakfast period. This is not, however, a correct way of putting it. The term "maximum" is out of place. What is observed is the presence of albumen for a certain period only, the urine during the remainder of the twenty-four hours being entirely free from albumen, instead of, as in ordinary Bright's disease, albumen being continuously present. This constitutes an important difference. I am quite prepared to consider that in Bright's disease there may be causes, apart from the renal conditions, to determine a fluctuation in the amount of albumen; indeed, in the lectures to which I have referred I expressed the opinion that it might be increased by food. Curiously enough, Dr. Saundby's table, if read by the amount of albumen voided per hour, stands in a striking manner diametrically opposed to what he has argued for. It is true that the percentage of albumen in the urine passed between 5 A.M. and 1 P.M. is higher than at other periods, but with this the urine is relatively considerably less in amount; and if the calculation be made so as to represent the amount of albumen eliminated per hour, it comes out in a marked manner less than at any other time, and otherwise the quantities present an irregularly fluctuating character.

I am, Sir, your obedient servant,

Grosvenor-street, March 24th, 1886. F. W. PAVY.

TREATMENT OF CHRONIC INVERSION OF THE UTERUS.

To the Editor of THE LANCET.

SIR,—Dr. Neale's letter in THE LANCET of March 13th is calculated to lead to a misconception of the point for which I contend—namely, that, as far as I yet know, I am the first person to have practised the operation for dividing the cervix uteri to facilitate reduction of chronic inversion of the uterus. In reply to this claim Dr. Neale again quotes Dr. Pratt as writing in March, 1868: "This mode of treatment is not new, although not mentioned by Murphy, &c....., but Dr. Wasseige of Liege says that it is the only legitimate, as it is the most effective, plan." "This," Dr. Neale says, "I think proves that the operation must have had an established reputation abroad before 1868, the date of Dr. Barnes' first operation."

This inference of Dr. Neale's is a glaring *non sequitur*. To help to clear up the question I wrote to Dr. Wasseige, asking him if he had ever performed this operation. The distinguished rector of the University of Liège refers me to his "Opérations Obstétricales," p. 429, for the following: "Lorsqu'on ne peut réduire par les moyens indiqués plus haut, et que le col est rétracté, le Docteur Aran a proposé le débridement multiple du col. Cette opération n'offre pas de grands dangers, et peut donner de bons résultats." The Professor in his letter to me (dated March 17th, 1886) goes on to say: "Pour mon compte je n'ai aucune expérience personelle; je n'ai jamais vu qu'un seul cas d'inversion ancienne, *et cela à une époque où l'on ne tentait aucune opération sérieuse, c'est-à-dire en 1862 ou 1863.*"

From this it will be seen that Dr. Wasseige cannot be held to have referred to the operation as one that had been practised. I myself quoted Aran, and pointed out that he did not describe the operation as having been done by himself or by anyone else.

If Gibbon's aphorism, "He alone discovers who proves," be true, Dr. Arbuckle was not wrong in describing the proceeding as "Barnes' operation."

I am sure Dr. Neale will now "digest" my claim to have been the first to demonstrate by practice the value of the proposal to facilitate reduction of chronic inversion of the uterus by incision of the constricting neck in aid of sustained elastic pressure.

P.S.—The recent news of the sad death of Professor Courty caused me to examine his work on the Diseases of the Uterus published in 1872. The lamented author describes the operation of incising the neck of the uterus as a means of enabling rapid reduction to be made by taxis. He calls it his method, and says he has practised it with success, the subject soon becoming pregnant. He does not specify the date of his case. Possibly it was earlier than my first case in 1868. But his account clearly proves that it was not in 1872 even one of established reputation. He does not refer to my memoir of 1868. And his proceeding differs from mine in that he makes incision the preliminary to forcible taxis, whereas I make it preliminary to sustained elastic pressure.

I am, Sir, yours truly,

March 20th, 1886. ROBERT BARNES.

MANCHESTER.

(*From our own Correspondent.*)

SMALL-POX AND SCARLATINA.

THE neighbouring township of Hyde is passing through a smart outbreak of small-pox, and finds itself sadly wanting in the necessary accommodation for isolating the sufferers. Fortunately for the town, most of the patients have been received into the fever hospitals at Stockport and Monsall, though the latter institution is situate some eight or nine miles from the homes of the patients. It is by no means satisfactory that Manchester, which is at present free from this disease, should thus have brought within its boundaries a number of cases simply because of the neglect of other health authorities to make proper provision for themselves. In the adjoining township of Crumpsall quite an epidemic of scarlatina has lately prevailed. The Local Board of this district, after communicating with the Local Government Board, have decided to pay a fee of 2*s.* 6*d.* for certificates furnished by medical men of the existence of infectious disease, though apparently no steps are to be taken to render the furnishing of these compulsory.

ASSOCIATESHIP OF OWENS COLLEGE.

A very interesting report upon the Associateship of Owens College has lately been published by the principal. He traces its history from the foundation in 1859 to the present time, during which period this distinction has been conferred upon 250 students. The changes which have been made in the regulations for its attainment have been uniformly in the direction of increased stringency, notwithstanding which

the numbers have been in much greater proportion during the past few years, no less than eighty having been elected during the past three years. At present the necessary qualifications are three years' *bond-fide* study in the College, and the obtaining either a university degree or the membership of the Royal College of Physicians or fellowship of the Royal College of Surgeons. Of the associates elected in the last three years, forty-one out of the eighty were graduates in arts, thus equalling the number of associates in medicine and science added together, showing that equal activity is displayed in the faculty of arts as of science.

VOLUNTEER WORK.

A meeting of medical men and students interested in the work of the Volunteers, presided over by Professor Lund, was held last week at Owens College to hear an address by Surgeon-Major Evatt on the desirability of forming a medical staff corps for the district on the lines carried out in the metropolis. Some of the officers and surgeons of the corps present were apprehensive that the connexion of the present regimental surgeons with their respective regiments would be interfered with, and as many of these have at the expense of much time and labour given ambulance courses to selected numbers of privates, this fear was allayed by Dr. Evatt pointing out that the status of Volunteer medical officers would in nowise be interfered with.

HORSEFLESH AS HUMAN FOOD.

Periodically we are made uneasy by rumours, or rather insinuations, that the sale of horseflesh as butcher's meat prevails very widely in the city and suburbs, especially amongst the poorer classes. Last year an official inquiry was held at the Town Hall, and at a recent meeting of the Executive Committee of the Manchester and Salford Butchers' Association the matter was again under discussion, though no very strong evidence appears to have been forthcoming as to the truth of the allegations. Surely if the butchers themselves know of such practices, it should not be difficult to put the proper officials on the track of the offenders and bring them to punishment. It is contemplated by the Association to decide upon some definite line of action in conjunction with similar bodies in other parts of the country. There can be no doubt that if horseflesh is sold as beef, it must be horseflesh of a very inferior quality.

HOSPITAL SATURDAY AND SUNDAY.

The Hospital Saturday and Sunday Fund has now reached a total of £7160, and it is not probable that much will be added to this sum. Possibly the fact that adjoining towns and districts have funds of their own may be one cause of the diminution this year, for at the annual meeting of the Bolton Infirmary it was stated that the Hospital Saturday and Sunday contributions had increased this year to £1230, against £1061 for the previous year.

Manchester, March 22nd.

LIVERPOOL.

(From our own Correspondent.)

THE RECENT SEVERE WEATHER AND THE HIGH DEATH-RATE.

THE recent severe weather has, as might have been expected, had its influence on the death-rate, especially of the young and aged. At the last meeting of the Health Committee the medical officer of health reported that the death-rate was equal to 29·5 per 1000 of the estimated population. The deaths of children below five years of age number 113, and of persons above sixty, 67. There were 115 deaths returned as due to diseases of the lungs. In the City Hospital for Infectious Diseases there were fifty-five patients, eleven having been admitted during the week; nine were discharged convalescent, and two cases of small-pox, both unvaccinated, died. In the Liverpool Workhouse there were during the week ending the 11th inst., a total of fifty-six deaths, eleven from bronchitis, and thirteen from phthisis.

INTERMENT IN CITY CHURCHYARDS.

Some of our intra-mural churchyards are still open to interment permissively, it being required that, if a grave is to be opened, there shall be sufficient depth to allow of five feet of earth being left above the coffin which it is proposed to inter. In a recent case this was not so, the last deposited coffin being too near the surface to permit of the above very wholesome requirement being ensured. The sexton had opened the grave without the permission of the medical officer of health, who, on hearing of the proposed burial, promptly interfered and stopped it.

THE LOCK HOSPITAL.

There is at present in Dr. Bernard's male ward an interesting case of skin affection which was admitted a month ago. The whole surface of the body, with the exception of the face and the soles of the feet, was covered by an extensive desquamation. The diagnosis was a matter of some difficulty. The history of the case pointed to a syphilitic origin, but the appearance of the scales, which in some situations were very large and of silvery whiteness, afforded strong presumption that a part of the eruption was of the simple kind. The scales in some parts were fully six inches in diameter, especially those found on the extensor surface of the knee and elbow. On the legs and dorsum of the feet copper-coloured papules were noticed. The palms of the hands presented scaling appearances which were absent on the plantar surface. The conclusion arrived at was that the case was of a mixed variety, which was justified by the treatment adopted. This consisted in applying to the surface a mixture of olive oil and oil of cade, together with mercurial vapour baths. The patient's condition has greatly improved, the desquamation has disappeared, and the eruption is satisfactorily waning.

THE DEPRESSION OF TRADE AND OVERCROWDING.

The prevailing depression of trade is evidenced by the largely increasing practice of subletting houses. Large numbers of families, formerly able to rent small houses, are now reduced to taking rooms in houses let off in tenements. Upwards of 19,000 sublet houses (exclusive of common lodging-houses) are now on the register, and incessant care is exercised by the sanitary staff to minimise the evils of the tendency to overcrowd, and at the same time to avoid harassing the poorer classes by a too strict carrying out of the letter of the law. Yet, with every leaning towards leniency, it becomes necessary to issue summons notices against some forty or fifty tenants in chief every week for permitting excessive overcrowding in their houses.

CHARITY ORGANISATION IN LIVERPOOL.

An old and valued charity, the Central Relief Society, was some years ago reconstructed as the Central Relief and Charitable Organisation Society. By its means a large number of the unemployed are provided with work, and others with food. Great care is taken to relieve distress without encouraging mendicancy or idleness.

Liverpool, March 17th.

EDINBURGH.

(From our own Correspondent.)

THE LORD RECTORSHIP OF THE UNIVERSITY.

THE Rosebery Club, consisting of members of the Students' Liberal Association, has commenced the usual triennial campaign in connexion with the election of a Lord Rector, and has selected as a candidate the Right Hon. Sir Lyon Playfair, till recently the Parliamentary representative of Edinburgh University. There are already two candidates in the field, Lord Iddesleigh and Professor Edward Freeman, the former supported by the Conservative students, the latter by the Independent Party. This really means a division of the Liberal interest, which, if undivided, would carry the election; and experience has shown that in three-cornered elections the Conservatives have an advantage from the absolute discipline they are able to maintain; this gives a solidarity to their vote unattainable by their opponents whose strength is almost hopelessly divided. The election does not take place until November; possibly before that date one of the candidates may retire, but this is a remote possibility, and it is to be feared that the Liberals will not be more successful than at the last election, when an independent candidate caused division in their ranks and made way for Lord Iddesleigh's success.

THE WATER OF LEITH BILL.

A Bill for carrying out sanitary measures for the improvement of the water of Leith, the stream which runs through an important district of this city, is before the

House of Lords this week. An influential deputation of Edinburgh citizens has been charged with the duty of lending it all possible support in London. Amongst those acting as general members of the committee are the Lord Provost of Edinburgh, Mr. Clark, and several members of the City Council; whilst Professor Douglas Maclagan and Dr. Littlejohn have joined the deputation, prepared with evidence as specialists on the matter. In Edinburgh there is a strong desire that the Bill may become law, as it is felt to be urgently necessary that some system of purification should be adopted which will obviate the present insanitary condition of the stream, which renders it absolutely dangerous to the part of the city it intersects, as well as making its vicinity extremely unwholesome during the summer months.

PROFESSOR SIR WILLIAM TURNER.

A congratulatory address, on his acceptance of the honour of knighthood, has been presented to Professor Sir W. Turner, F.R.S., by the Executive Committee of the Students' Representative Council, a body which represents the undergraduates in all the faculties in the University. In the address, which is couched in very flattering terms, special notice is taken of the close manner in which Sir W. Turner has been associated with the representation of the University interests, as a member of the Royal Commission on the Medical Acts, and as the University representative upon the General Medical Council. In these and other positions his successful efforts to conserve and further the prosperity of this school are commented on, and thankfully acknowledged. The completion of the splendidly equipped Anatomical Museum, which the Professor has so indefatigably laboured for, is also made the subject of congratulation. The address is expressly stated to be an expression of the feeling of the whole constituency which the Council represents, and is the more flattering from the very large numbers of students, over 3000 in all, whose congratulations and good wishes it incorporates.

THE CITY FEVER HOSPITAL.

At a recent meeting of the Town Council, Dr. Russell, convener of the hospital committee, reported that it had been found difficult to obtain the services of a visiting physician for this institution, there being no salary attached to the post. A difficulty also existed as to what body or official had the legal right to confer the post upon any candidates who may yet be forthcoming. The former point was left unsettled, but the meeting decided to obtain counsel's opinion upon the legal question before proceeding further in the matter. In giving a report of the present state of the hospital, Dr. Russell said that there were just now sixty-nine inmates, that the hospital arrangements are most efficiently carried out, and that the patients express themselves well satisfied with the treatment and care which they receive. There are over thirty children in the wards at present, on whose behalf Dr. Russell appealed to the general public, as the hospital is not provided with either toys or pictures.

ROYAL HOSPITAL FOR SICK CHILDREN.

A vacancy has occurred on the staff of this hospital owing to the resignation of Dr. Dyce Fraser, who held the post of extra-physician in charge of the out-patient department. There are several candidates in the field in connexion with the appointment, which is a very important one, from the fact that this hospital is now largely laid under requisition for teaching purposes, and affords opportunities of clinical instruction in a branch essentially necessary to the completeness of the course of study in the Edinburgh School.

Drs. Berry Hart and A. H. Barbour have been appointed to the posts of Assistant-Physicians to the Royal Infirmary in the Department of Gynæcology.

Edinburgh, March 23rd.

ABERDEEN.

(From our own Correspondent.)

TESTIMONIAL AND FAREWELL DINNER TO DR. SIMPSON.

THE members of the medical profession in Aberdeen have presented Dr. Simpson with a handsome gold watch and chain, as a tangible proof of their appreciation of his services as medical officer of health for the city, and of the pleasant relations that have always existed between them and him in the execution of his duties. The presentation of the testimonial took place on Wednesday, the 17th inst., in the presence of a large number of the profession, in the Aberdeen Medico-Chirurgical Society's Hall. Dr. Struthers, President of the Society, occupied the chair; and Dr. Beveridge, who has done so much for sanitary science in Aberdeen, acted as spokesman for his medical brethren. On the following evening a public dinner was given in the Palace Hotel, and a large number of prominent citizens, as well as the majority of the profession, were present to wish Dr. Simpson god-speed and success in his new sphere of labour. In the unavoidable absence of Lord Provost Matthews, Professor Struthers presided, and Baillie Kinghorn was croupier. Dr. Simpson has always taken a lively interest in physical education, and a year ago he was elected chairman of the Aberdeen Gymnastic and Rowing Club. The members of the Club met on Saturday to bid their chairman good-bye, and at the same time presented him with an excellent dressing-case and desk.

THE DUTIES OF THE MEDICAL OFFICER.

Universal regret is felt at the retrograde step the Town Council have taken in deciding that the medical officer should no longer be head of the sanitary department. The various officials are to be responsible to the Public Health Committee, and not to the medical officer, as was the case during Dr. Simpson's term of office. Till the vacancy has been filled up, Dr. MacGregor will act as medical officer of health for the city.

Aberdeen, March 23rd.

PARIS.

(From our own Correspondent.)

VISIT TO M. PASTEUR'S LABORATORY.

I PAID another visit to M. Pasteur's laboratory on Saturday last, where I saw almost all the same persons that I had met there on the previous Tuesday awaiting their turn for inoculation. Dr. Hime, with his party of seven, were also present, and he informed me that another person, who is said to have been bitten by the same dog, had just arrived from Bradford. The nineteen persons concerning whom M. Pasteur had received a telegram from Berlin, referred to in my letter of last week, have also arrived. They are all Russians, and were bitten on Feb. 28th last by a rabid wolf at Beloi, near Smolensk; they were all severely bitten, and five of them so badly that they had to be conveyed to the Hôtel Dieu to have their wounds attended to, where M. Pasteur inoculated them. The other fourteen are lodged in an hotel near the laboratory, and are under the immediate care of the Russian physician who brought the party over, and who accompanies them each morning to the laboratory. The condition of the five patients at the Hôtel Dieu is considered most serious, not only from the severity of the bites, but more particularly from their situation, being inflicted on the face, which M. Pasteur regards as the most dangerous part. Instead of inoculating as usual once a day, M. Pasteur performs the operation twice daily with these Russians for the same number of days—viz., ten,—as he believes the bite of a wolf to be much more terrible than the bite of a dog, which the Russian physician testifies to by the statement that, according to his experience, of twenty persons bitten by a mad wolf, eighteen succumbed to rabies. At my visit on Saturday I saw a woman who said that she had been bitten by her donkey, which had previously been bitten by a mad dog.

To my letter of last week I may add the following note concerning M. Pasteur's laboratory, which I have since had an opportunity of looking over. The rabbits for experiment, which are of all sizes and colours, are kept in iron cages, divided off in compartments, so that each rabbit has its separate box. After the death of a rabbit from rabies after inoculation it serves as a subject for another, from which M. Pasteur extracts the virus, and which in its turn, after death, also becomes a subject, and so on one after the other. This process was begun three years ago, and has been continued ever since without interruption. The portion of the spinal marrow containing the virus is preserved in bottles, being suspended in the interior from the cork

without touching the sides; at the bottom of the bottle are placed some fragments of potash which keep the air within in a dry state. When he is about to inoculate, M. Pasteur withdraws with great care the marrow from the bottle, which he passes rapidly through the flame of a spirit-lamp, already prepared, in order to destroy the germs which might have been deposited on the surface of the marrow. With a pair of scissors, which have also been heated by the flame, he cuts two or three small bits of the marrow of about the length of half a centimetre, which he again cuts up into small fine pieces, and which he drops into a small glass. On the table are placed small glass balloons hermetically closed by the heat of a lamp, and which have been previously filled with sterilised broth. The assistant breaks the point of a balloon, and draws up with his mouth, through a glass tube, a little of the liquid, which he drops into the glass. This broth serves as a vehicle for the rabic marrow. With a glass rod he presses and triturates the marrow in the broth; a sort of emulsion is thus formed, which, when precipitated, leaves a yellowish liquid, with which the inoculations are performed. As stated in my last, these are executed by Dr. Grancher, and the question may be asked why M. Pasteur does not do them himself. In the first place, he would not have time, as he attends to the applicants, whose names he calls out himself, and presents them for the operation. In the next place, not being a medical man, he would be guilty, according to French law, of illegal practice. The applicants are divided into groups, and as the inoculating virus becomes altered in strength daily, the new comers are first inoculated with the weakest virus, and the older ones with the fresh virus. The assistant fills the syringe, which contains a little less than a cubic centimetre, which he hands to Dr. Grancher, who performs the operation as described in my last. I may here observe that the same needle serves for several persons on the same day without undergoing any antiseptic preparation or even being wasted, which rather surprised me, particularly in these days of microbophobia. Dr. Grancher informed me that of every ten applicants for the inoculation eight belonged to the male sex. In a conversation with M. Pasteur, he told me that the subscriptions for the establishment of a suitable place for the carrying out of his method are flowing in from all quarters, and that the amount already far exceeds his expectations. At the last meeting of the Council of Public Hygiene of the department of the Seine the sum of 1360 francs was subscribed for the undertaking. M. Pasteur who was present, thanked the Council for the interest it took in the creation of an institution which is to bear his name, and added that it would find itself thus associated with a work which will perhaps become something more than an institution for anti-rabic inoculation, and which may form a centre for the study of virulent and infectious maladies. M. Pasteur is a man of ordinary size, about sixty years of age, rather thick-set, and somewhat brusque in his manner. About ten years ago he had an attack of apoplexy, which resulted in hemiplegia of the left side, from which, however, he has in a great measure recovered, and he seems not to have lost any of his former energy and intelligence.

One of the Russian patients who was bitten by a mad wolf, and who was sent to the Hôtel Dieu owing to the severity of his wounds, died on Monday at that hospital from hydrophobia, the symptoms of which manifested themselves on the previous Saturday, after the eighth inoculation—that is to say, when, according to M. Pasteur's method, the treatment had not been completed.

Dr. Triboulet died suddenly on Sunday night, the 21st inst. He took his degree in 1853, and was at his death physician to the Trousseau Hospital.

Paris, March 23rd.

THE SERVICES

THE Queen has been pleased to allow Henry Pottinger Keatinge, Surgeon-Major in the Egyptian Army, to accept and wear the insignia of the Fourth Class of the Order of the Osmanieh, which His Highness the Khedive of Egypt, authorised by His Imperial Majesty the Sultan, has been pleased to confer upon him, in recognition of his services whilst actually and entirely employed beyond Her Majesty's dominions in the Egyptian Army.

ADMIRALTY.—Deputy Inspector-General of Hospitals and Fleets Timotheus John Haran has been promoted to the rank of Inspector-General of Hospitals and Fleets in Her Majesty's Fleet. Fleet Surgeon William James Eames has been promoted to the rank of Deputy Inspector-General of Hospitals and Fleets in Her Majesty's Fleet.

The following appointments have been made:—Deputy Inspector-General Doyle M. Shaw, C.B., to Malta Hospital; Deputy Inspector-General Adam B. Messer, M.D., to Plymouth Hospital; Surgeon Cyril J. Mansfield, to Haslar Hospital; Surgeon Horace Elliott, to the *Duke of Wellington*, for service at Haslar Hospital; Surgeon Percy Edmund Maitland, to the *Impregnable*, for service in the *Canopus*; Surgeon Matthew Digan, to Haulbowline Hospital; Surgeon George William F. Armstrong, to the *Monarch*; Surgeon Charles Albert Macaulay, to the *Belleisle*; and Surgeon John Nicholas Corbett, to the *Coquette*.

MILITIA MEDICAL STAFF.—Surgeon Alexander Skipton, 9th Brigade, North Irish Division, Royal Artillery, to be Surgeon-Major.

VOLUNTEER MEDICAL STAFF CORPS.—Richard Lake Gent., to be Surgeon.

Obituary.

T. SPENCER COBBOLD, M.D., F.R.S., F.L.S.

WE deeply regret to announce the death of this esteemed and well-known member of the profession, which took place at his residence in Portsdown-road, Maida-hill, on the 20th inst. To many of his friends the news came with a shock of surprise, for it was not widely known that his health had been broken for some months past. The first symptoms of his ailment were manifested by a syncopal attack which occurred after speaking by request at the soirée held at the Middlesex Hospital last summer. It appeared that he was suffering from aortic disease with cardiac hypertrophy, and, notwithstanding cessation of work and enforced quietude, he became subject to anginal attacks and cardiac dyspnœa. He died in one of these paroxysms.

Dr. Cobbold was one of the well-known family of that name in Suffolk. He went to Edinburgh to study medicine, and was a fellow-student and friend of several distinguished men there. He was a devoted pupil of John Goodsir and Edward Forbes. In 1851 he took his M.D. degree, and was, with Charles Murchison, Burdon Sanderson, and four others, a gold medalist of his year. He became subsequently Curator of the Anatomical Museum in the University, and was elected Senior President of the Royal Medical Society in 1851-52, Dr. Dobie of Chester being junior president the same year. He remained for some years in Edinburgh working diligently at comparative anatomy under Goodsir. Subsequently he came to London, and was appointed Lecturer on Botany, Zoology, and Comparative Anatomy at the Middlesex Hospital School. For some time he lectured there on Parasitic Diseases. He was also lecturer at the Veterinary College. He did not practise for some years after settling in London, and about twenty years ago he devoted himself to a limited sphere of work as a consultant in cases of parasitic disease, helminthology being a very special and favourite line of pursuit with him. He was without doubt one of the first British authorities on this subject, and made several original and valuable investigations in it, many of the results of which were from time to time contributed to our columns. He was elected into the Royal Society about 1865. His work was always carefully done, and pursued with persistency and enthusiasm. He was clear and dogmatic as a teacher, and had always the courage of his opinions.

The social side of his character was well marked. He was kind and affectionate in disposition, and thus won and kept many friendships. He was devoted to music, and possessed a remarkable voice, a high pure alto, which none who ever heard it can forget. At the dinner of the Edinburgh Club, which he regularly attended, he was often a contributor to the subsequent musical entertainment. He published several works on the Entozoa, one of which is a classical treatise on the subject. Many foreign scientific societies enrolled him as honorary and corresponding member. He held the Swiney Lectureship on Geology at the British

Museum for the allotted term of two years, this post being open only to graduates in medicine of Edinburgh. He never joined the College of Physicians of London, or took any diploma other than that of his degree. All who knew him in any capacity must find cause for lament at his decease at the comparatively early age of fifty-seven. He leaves a wife and several children, having married early in life. It is not too much to affirm that his peculiar place in the profession can hardly be filled up. The study of helminthology is not a very attractive one, and few are found to devote laborious attention to the abstruse and difficult problems involved in it, especially in its etiological and developmental relations. It is still less likely that anyone will take up the subject with a view to attain position as a consultant in so limited a specialty. His success in treatment, after failure on the part of others, appeared to depend on careful method and timing of the dosage of anthelmintics, and he laid great stress on the importance of procuring only good and trustworthy drugs as vermifuges. He had never the manner or habits of a physician, and was perhaps chiefly esteemed as a man of science and a votary of biological studies. He himself did not cultivate practice. Not that he was quite independent of it, but he loved nature more. His love of nature was keen, and he delighted in being face to face with every aspect of it. Amongst his last regrets was this—that he felt unequal to arrange his accumulation of facts for publication, and his greater longing was to live on to see the charms of another spring and summer after the long and bitter winter which so cruelly tried him. He has left us, and has entered now on that fuller life which must bring to him such joys as his busy and contemplative career here so well prepared him for. *Quando ullum inveniemus parem?*

DANIEL ELIAS, M.D.

SOUTHPORT has lately sustained the loss of a highly popular and much respected medical man. Dr. Daniel Elias began his professional career as assistant to the late Dr. Scowcroft, with whom he afterwards entered into partnership. On the death of Dr. Scowcroft he commenced practice on his own account, and became rapidly known and liked in the town. Some years later he took his brother, Dr. Tom Elias, into partnership, and the two brothers enjoyed a very extensive practice—so large, indeed, that it completely occupied the whole of Dr. Elias's time. He acted for many years as honorary medical officer to the infirmary, and was very active in his endeavours to ameliorate the condition of the poor; it was mainly due to him that the Southport Infirmary attained its present efficiency. In all matters concerning the welfare of the town Dr. Elias took an active part, and was esteemed for his business capacities as well as his professional ones. He was most popular with all classes of society, and owed a great portion of his success to his untiring energy and great power of sympathy. His death, at the age of forty-eight, took place on March 1st, from nervous prostration, general debility, and atrophy of the heart. He had been suffering from great weakness for some six months previously, and had in a measure retired from active practice. His funeral was attended by a large number of his professional brethren, as well as by an immense concourse of friends and patients.

MEDICAL NOTES IN PARLIAMENT.

The Lunacy Laws.

ON the 18th inst. the House of Lords went into Committee on the Lunacy Laws Amendment Bill, when, after some discussion, in which the Earl of Selborne, the Lord Chancellor, Viscount Cranbrook, and other peers took part, the Lord Chancellor withdrew all the clauses relating to idiots and imbeciles as distinguished from lunatics, and announced his intention of at once introducing a Bill dealing with idiocy. Numerous amendments having been agreed to, the clauses of a controversial character were postponed.

Burgh Police and Health (Scotland) Bill.

On the 23rd inst. the Earl of Elgin moved the second reading of this Bill.—Lord Balfour of Burleigh said he understood there were points in the Bill which, in the opinion of some critics, were open to grave objection; but those who were best entitled to speak for the inhabitants of the burghs affected by it were perfectly unanimous that some such measure was required. He hoped, however, that an interval of ten days or a fortnight would be given before the committee stage of the Bill was taken, in order that a reasonable time might be afforded for its consideration.—The Earl of Galloway suggested that it would be well if the Government would consider whether the time had not now come when there ought to be established one general police force of an Imperial nature.—The Earl of Elgin having spoken, the Bill was read a second time.

Imbeciles.

The Lord Chancellor presented a Bill to give facilities for the care, education, and training of idiots and imbeciles.

Ventilation of the House of Commons.

In the House of Commons on the 23rd inst., on the motion of Mr. Leveson-Gower, a Select Committee was appointed to inquire into the ventilation of the House, as follows:—Dr. Farquharson, Sir H. Roscoe, Mr. Lyell, Sir G. Hunter Mr. Isaacs, and Mr. R. Power.

Medical News.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—At a recent meeting of the Board of Examiners the undermentioned was admitted a Fellow of the College:—

Henry Plunket Esmonde-White, Surgeon-Major, A.M.D.

SOCIETY OF APOTHECARIES.—The following gentlemen passed the examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received certificates to practise, on the 18th inst.:—

Adie, Alexander James, Leonard-street.
Halsted, Harold Cecil, M.R.C.S., Slindon, Arundel, Sussex.
Lister, Joseph Jackson, M.R.C.S., Wimpole-street.
Pope, Henry Alex. Lepthairis, Donegal, Ireland.
Priestley, Percy, M.R.C.S., Norfolk-street, Sheffield.

ROYAL HOSPITAL, BELFAST.—A portrait of Mr. Lyons, D.L., has been presented to this institution in recognition of his services to the hospital.

ON the 22nd inst. a meeting, presided over by the Lord Mayor, was held at Stratford, to further the formation of a cottage hospital for West Ham.

DOUBLE CATARACT EXTRACTION AT AN ADVANCED AGE.—An old Russian tailor whose age is 101 has just had cataract extraction performed successfully on both eyes.

A HAMBURG merchant has left 450,000 marks (£22,500) for the erection of a sea-bathing infirmary at Cuxhaven at the mouth of the Elbe.

THE Dutch Ministry has undertaken to introduce into the Chamber a measure for preventing the adulteration of food, and especially the sale of artificial butter, the so-called "margarine."

THE Chemical Laboratory of the Liverpool University College was opened on Saturday, when Lord Derby, the president, was expected to be present, but was prevented through indisposition. Sir Lyon Playfair addressed a large and influential company in the lecture hall.

MEDICAL MAGISTRATES.—Professor R. J. Anderson, of the Queen's College, Galway, and Beechill House, co. Down, has been appointed a Justice of the Peace for the latter county. Frederic Orton, M.D., Crouch-end, N., and F. H. Daly, have been appointed Justices of the Peace for the county of Middlesex. Mr. Marshall Weir, M.R.C.S., the medical officer of Dromore Dispensary, has been placed on the Commission of the Peace for the county of Down.

BRISTOL ROYAL INFIRMARY.—At the annual general board meeting of the trustees of this institution on the 23rd inst., it was reported that the total income during the past year had amounted to £16,000, including a legacy of £5000, and that the total expenditure was £12,000. The number of in-patients, as compared with those received during 1884, showed a diminution, which may be accounted for by the fact that during 1885 the triennial cleaning of the house took place, which necessitated the closing in succession of all the wards. The committee desire it to be known that ladies can now be received as probationers, for training as nurses, upon the same system as in the London hospitals.

POISON IN CABBAGE-SOUP.—A number of Russian peasants have been poisoned by *kohl*- or cabbage-soup, made from vegetables preserved in vessels which, on examination, proved to be coated internally with a very appreciable quantity of arsenic. The victims were treated with milk, and though for a time they were apparently in great danger, all recovered. No clue has been discovered as to the manner in which the arsenic found its way into the barrel of "*kohl*."

HEALTH EXHIBITION, YORK.—A meeting was held at York on the 17th inst., to consider the arrangements to be made for the Sanitary Congress and Health Exhibition to be held in the city in September next, by the Sanitary Institute of Great Britain. An influential deputation from the institute attended and spoke of the satisfactory results which had followed previous congresses. It was decided that the meetings should commence on September 21st, and that the exhibition shall remain open one month.

THE NOMENCLATURE OF BRAIN DISEASES.—In pursuance of a resolution passed at the Medical Congress on Brain Diseases, held during last summer at Antwerp, by which it was suggested that local conferences should be held to draw up trustworthy international tables of statistics on insanity, a conference of Austro-Hungarian specialists is to be held at Vienna with the object of revising and extending the nomenclature of mental disorders. Invitations to the conference have been issued by four leading medical men of Vienna.

A FRIVOLOUS OBJECTION.—The Paris Civil Tribunal has just decided a case in which Dr. Peyrol, head surgeon at the Hôtel Dieu, claimed 800 francs for extracting a bullet from a young lady who had accidentally shot herself. The claim was disputed on the ground that the plaintiff stated erroneously that the bullet was lodged in the right thigh. The tribunal overruled the plea, believing that it mattered very little whether the bullet was on the right or the left side so long as the patient's sufferings had been relieved, and judgment was consequently given for the plaintiff.

THE LONDON HOSPITAL.—The increased accommodation recently provided for nurses at the London Hospital, Whitechapel-road, E., now enables that institution to supply thoroughly trained nurses to private families. Nurses trained in the busy wards of this large hospital must have exceptional opportunities for gaining experience of a nature likely to render them specially efficient, and it is satisfactory to learn that the constantly increasing demands of the public for skilled home nursing are to be met by fresh efforts to maintain an adequate supply.

THE BLANE MEDALS.—The two gold medals founded by the late Sir Gilbert Blane, Bart., to be conferred, once in two years, on two medical officers of the Royal Navy who shall have delivered into office journals evincing the most distinguished proofs of skill, diligence, humanity and learning in the exercise of their professional duties while in medical charge of ships, have been awarded, by the Director-General of the Medical Department of the Navy, jointly with the Presidents of the Royal Colleges of Physicians and Surgeons, to Fleet-Surgeon Henry Scott Lauder and Surgeon Myles O'Connell McSwiny.

NORTH-WESTERN ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.—The annual meeting of the members of this Association was held on the 11th inst. In the eleventh annual report, which was read and adopted, the committee congratulated the members on the increased usefulness of the Association, which continues to render good service to the public and to the profession. There are now thirty-seven members, twenty-seven associates, and four honorary members. Dr. G. H. Gornall (Warrington) was elected President for the year; Dr. W. H. Barr (Bury), Vice-President; Dr. Pettinger, Treasurer; and Mr. Vacher, Honorary Secretary.

A CHILD POISONED BY THE NURSE'S COSMETIC.—A German practitioner being called to see a child of five weeks old who was continually crying and suffering from colic, and whose skin was of a dull bluish tint, was somewhat puzzled as to diagnosis, until looking at the nurse's face, and seeing it of a brilliant white and red tint, he touched the surface, which left a greasy stain on his finger of a cosmetic rich in lead. This poisonous substance the nurse had long been in the habit of using for the purpose of improving her complexion. The cause of the child's colic being removed, and appropriate treatment adopted, a cure was effected in a few days.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

BROWNE, DANBY, L.K.Q.C.P.I., L.R.C.S.I., has been appointed Medical Officer for the Clunbury and Hopesay District of the Clun Union.

CLAPP, ROBERT, L.R.C.P.Lond., M.R.C.S., has been appointed Senior Assistant Medical Officer to the Devon County Asylum.

COOPER, AUSTIN N., F.R.C.S.I., has been appointed Medical Superintendent to the British Hospital, Buenos Ayres.

CULLIN, RICHARD B., L.R.C.S., L.R.C.P.Ed., has been appointed Medical Officer for the Tiverton District of the Tiverton Union.

DODSON, ARTHUR E., M.R.C.S., L.R.C.P.Ed., has been appointed Medical Officer for the Workhouse, Garratt-lane, of the Wandsworth and Clapham Union.

ERSKINE, ROBERT, M.D., has been appointed Medical Officer for the Camborne District of the Redruth Union.

GOODRIDGE, WILLIAM P. B., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Surgeon-Superintendent in the Queensland Government Emigration Service.

HOARE, WILLIAM, M.R.C.S., L.R.C.P.Ed., has been appointed Medical Officer for the Titchfield District of the Fareham Union.

MAGGS, WILLIAM ADOLPHUS, L.R.C.P.Lond., M.R.C.S., L.S.A.Lond., L.D.S.Eng., has been appointed Dental Surgeon to the North-West London Hospital, vice F. Newland Pedley, F.R.C.S.Eng., L.D.S., resigned.

MAILE, C. E. DRAYSON, M.R.C.S., L.R.C.P.Ed., has been appointed Medical Officer for the Seventh District of the Lexden and Winstree Union.

MORTIMER, JOHN, M.B.Lond., has been appointed Surgeon-Administrator of Anæsthetics to the Dental Hospital of Exeter.

PERRY, F. F., Bengal Medical Service, has been appointed Professor of Surgery and Anatomy to the Lahore Medical School, Punjab.

PLATT, HENRY T., M.B., has been appointed Assistant House-Surgeon to the Preston Royal Infirmary, vice F. P. Maynard, M.B., M.R.C.S., L.R.C.P.Lond., resigned.

PRENDERGAST, J. M., M.D. Royal Univ., M.R.C.P.Lond., M.R.C.S., has been appointed Resident Physician to the Hertford British Hospital, Paris.

ROPER, ARTHUR C., M.R.C.S., has been appointed Surgeon-Administrator of Anæsthetics to the Dental Hospital of Exeter.

TISDALL, JOHN J., L.R.C.S., L.R.C.P.Ed., has been appointed Medical Officer for the South Municipal District of the West Derby Union.

WALKER, LAWRENCE NEWMAN, L.F.P.S. & L.M.Glas., L.S.A.Lond., has been appointed by the Cape Government District Surgeon and Public Vaccinator for Calvinia of the District of Clanwilliam, Western Province, South Africa.

Births, Marriages, and Deaths.

BIRTHS.

HENDERSON.—On the 21st inst., at 6, Hampstead-lane, Highgate, London, the wife of A. Milne Henderson, M.D., of a daughter. Australian papers please copy.

HOLMES.—On the 20th inst., at Priory House, Kew, the wife of Gordon Holmes, M.D., of a son.

LUCAS.—On the 14th inst., at Bury St. Edmunds, the wife of R. H. Lucas, M.R.C.S., of twin boys.

MAXWELL.—On the 23rd inst., at Lasswade, the wife of C. M. Maxwell, M.B., of a son.

MORSE.—On the 16th inst., at Prince of Wales-road, Norwich, the wife of Thomas H. Morse, F.R.C.S.Eng., of a son.

SHORE.—On the 22nd inst., at Hill Side, Crouch-hill, N., the wife of T. W. Shore, M.D., B.Sc., of a daughter (stillborn).

MARRIAGES.

BREMNER—CLIFTON.—On the 17th inst., at Victoria-street Congregational Church, Derby, Alex. T. Bremner, L.R.C.S., L.R.C.P., of Leicester, to Constance Annie, second daughter of Frederick Clifton, of Derby.

HARWOOD—ROBINSON.—On the 18th inst., at St. James's, Pokesdown, Bournemouth, Sweitzer Soutter Harwood, M.D. Univ. of Pennsyl., L.K.Q.C.P. & L.M.Irel., of Gordon House, Pokesdown, to Josepha, widow of John Mundell Robinson, of Edinburgh.

SMART—WATSON.—On the 17th inst., at Ballanelerоch, Stirlingshire, Robert Smart, M.D., of Glasgow, to Mary Anne Matilda, youngest daughter of the late William Leckie Ewing, of Arngomery, and widow of James Francis Watson, of Pitcairns, Perthshire.

DEATHS.

BRONNER.—On the 19th inst., at Manor-row, Bradford, Yorks, Edward Bronner, M.R.C.S., L.S.A.Lond., in his 64th year.

COBBOLD.—On the 20th inst., at Portsdown-road, W., Thomas Spencer Cobbold, M.D., F.R.S., F.L.S., aged 57.

GODFRAY.—On the 12th inst., at St. Helier's, Jersey, C. Le Vesconte Godfray, M.R.C.S., L.M., L.S.A.Lond., Surgeon to the General Hospital and Prison, son of the late Francis Godfray, Esq., Barrister-at-law and Advocate of the Royal Court of Jersey.

PARKIN.—On the 18th inst., at his residence, Codrington-place, Brighton, John Parkin, M.D., F.R.C.S., formerly H.M.'s Medical Inspector for Cholera in the West Indies, in his 80th year.

WILLIAMSON.—On the 16th inst., at Rothesay-road, St. Leonards-on-Sea Francis Williamson, L.R.C.P., M.R.C.S., late Surgeon, Royal Navy, aged 32.

N.B.—*A fee of 2s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.*

BOOKS ETC. RECEIVED.

BAILLIÈRE, TINDALL, & COX, King William-street, Strand, London.

The Science and Practice of Surgery. By F. J. Gant, F.R.C.S. In 2 vols. Third Edition, revised and much enlarged throughout. pp. 1089—1183, profusely illustrated.

Mind your Eyes! Advice to the Short-sighted by their Fellow-sufferer, Franciscque Sarcy. Translated by R. E. Dudgeon, M.D. pp. 87.

BELL & SONS, York-street, Covent-garden.

Westgarth Prize Essays on the Street-Re-alignment, Reconstruction, and Sanitation of Central London, and on the Re-housing of the Poorer Classes. pp. 276, with Maps.

CASSELL & Co., London, Paris, New York, and Melbourne.

A Manual of Surgery. In Treatises by various Authors. Edited by Frederick Treves, F.R.C.S. In 3 vols. pp. 576—620—648, with numerous Illustrations, 7s. 6d. each volume.

"Unicode": the Universal Telegraphic Phrasebook.

CHURCHILL, J. & A., New Burlington-street, London.

A Manual of Midwifery. By A. L. Galabin, M.A., M.D., &c. pp. 807, with 227 Illustrations.

DAVIS, G. S., Detroit, Michigan.

Select Extra-Tropical Plants readily eligible for industrial Culture or Naturalisation. By Baron F. von Mueller. pp. 449. New Victorian Edition of the same, revised and enlarged. pp. 466.

GRIFFIN, C., & Co., Exeter-street, Strand, London.

A Short Manual of Chemistry. By A. Dupré, Ph.D. &c., and H. Wilson Hake, Ph.D. &c. Vol. I.: Inorganic Chemistry. pp. 365, with a coloured Plate.

JOHNSTON, W. & A. K., Edinburgh & London.

A Practical Treatise on the Sputum. By G. Hunter Mackenzie, M.D.Edin. pp. 104, with Coloured Plates.

KEGAN PAUL, TRENCH, & Co., Paternoster-square, London.

"All But": a Chronicle of Laxenford Life. By Pen Oliver, F.R.C.S. pp. 325, with 20 Illustrations by the Author. 6s.

LEWIS, H. K., Gower-street, London.

Contributions to the Physiology and Pathology of the Breast and its Lymphatic Glands. By Chas. Creighton, M.D. pp. 222, with Illustrations.

Coca, Cocaine, and its Salts. By William Martindale, F.C.S. pp. 69.

LONGMANS, GREEN, & Co., Paternoster-row, London.

Savouries à la Mode. By Mrs. de Salis. pp. 52.

PUTNAM'S SONS, New York & London.

How we treat Wounds to-day. By R. T. Morris, M.D. pp. 162.

SAXON & Co., Bouverie-street, London.

Salammbô of Gustave Flaubert. Englished by M. French Sheldon. pp. 421.

SMITH, ELDER, & Co., Waterloo-place, London.

Dictionary of National Biography. Edited by Leslie Stephen, Vol. VI.: Bottomley—Browell. pp. 471.

THOM & Co., Dublin.

Calendar of the Royal University of Ireland for 1886.

WOOD, WILLIAM, & Co., New York.

Practical Human Anatomy. By F. D. Wiesse, M.D. pp. 456, with 222 lettered Plates.

Transactions of the Michigan State Medical Society, 1885.—The Influence of Sex of Fœtus in Utero on length of Inter-gestation Period immediately following its Birth; by J. Stockton-Hough, M.D. (Wood, New York.)—Four Cases of Abdominal Surgery; by J. Eastman, M.D.—The Parental Don't, or Warnings to Parents; by Serious Senior.—Sborník Lékarsky; redigují Dr. Jaroslav Hlava and Dr. Josef Thomayer.—A Mad World: a Vision; by Ouida.—Goitre in the Himalayas; by Brigade-Surgeon William Curran.—The Protective Value of Anthrax Vaccination; by John H. Clarke, M.D.—Scientific Memoirs by Medical Officers of the Indian Army; edited by B. Simpson, M.D. Part I. (Calcutta.)—Cholera and Water; by Surg.-Gen. M. C. Furnell, M.D.—Comments on Pasteur's Method of Treating Hydrophobia; by C. W. Dulles, M.D.—On the Origin, Habits, and Diffusion of Cholera; by Sir J. Fayrer, K.C.S.I., M.D., F.R.S.—Cocaine in Hay Fever; by S. S. Bishop, M.D.—Ireland and Home Rule; by Joseph Cowen, M.P.—Official Register of Physicians and Midwives now in Practice to whom Certificates have been issued by the State Board of Health of Illinois.—Diseases of the Rectum; by Samuel Benton, L.R.C.P.L., M.R.C.S., &c. (Renshaw.)—A Discourse on the Principles of Domestic Fireplace Construction; by T. P. Teale, M.A., F.R.C.S.—What is Medicine? by A. L. Gihon, M.D.—The Law and the Lunatic; by G. Sigerson, M.D. &c. (Hodges, Figgis, and Co., Dublin.)—Note on Peritoneoclysis, Hypodermoclysis, and Vesicoclysis in Cholera; by Brigade-Surgeon C. Macdowall.—Loss of Life and Property by Lightning at Home and Abroad; by W. MacGregor.—Some Pathological Bearings of Darwinism; by D. A. Gresswell.—Our Young Ladies; by Lillie Harris. (Walter Scott, London.)—A Controversy on Cholera between F. Contilló Vargas-Machuca and Joseph Bagetto, Ph.B., M.B. (Renshaw.)—Electricity and Metallo-Therapeutics in their Application to Medicine; by Cresswell Hewett, M.D. (Baillière, Tindall, & Cox.)

Medical Diary for the ensuing Week.

Monday, March 29.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.

ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesdays, same hour.

CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2 P.M.

HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.

SOCIETY OF ARTS.—8 P.M. Mr. Boverton Redwood: Petroleum and its Products (Cantor Lecture).

MEDICAL SOCIETY OF LONDON.—8.30 P.M. Dr. Day: Irritable Brain and Congestion of the Brain in Children.

Tuesday, March 30.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.

CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Prof. Arthur Gamgee: The Function of Circulation.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—5 P.M. Dr. P. W. Latham: On some Points in the Pathology of Rheumatism, Gout, and Diabetes.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8.30 P.M. Mr. Barwell: On Supra-pubic Lithotomy.—Mr. Rivington: A case of Vesical Calculus of unusually large size removed by Supra-pubic Cystotomy.—Mr. Jacobson: A case of Supra-pubic Lithotomy.

Wednesday, March 31.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesdays and Thursdays, 1.30 P.M.

ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department, Tuesdays and Fridays, 9.30 A.M.

ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.

LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.

GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.

KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; and on Friday, 2 P.M.; and Saturday, 1 P.M.

SOCIETY OF ARTS.—8 P.M. Dr. T. R. Armitage: Methods for Rendering the Blind Self-supporting.

Thursday, April 1.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Prof. Dewar: Electro-Chemistry.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—5 P.M. Dr. P. W. Latham: On some Points in the Pathology of Rheumatism, Gout, and Diabetes.

PARKES MUSEUM OF HYGIENE.—8 P.M. Dr. Louis Parkes: London Vestries and the Administration of Sanitary Law in the Metropolis.

HARVEIAN SOCIETY OF LONDON.—8.30 P.M. On the Treatment of Obscure Forms of Uterine Metrorrhagia.

Friday, April 2.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.—8 P.M. Mr. Percy Dunn: (1) Scirrhus Growth of Breast; (2) Sac and Contents of large Femoral Hernia, with Gangrene of Walls; (3) Stomach from case of Carbolic Acid Poisoning.—Brigade-Surgeon Curran: Photographs of Blephantiasis and Oriental Boil, Native Indian Eye Probes, and Gallstones.—Mr. R. F. Benham: On Epileptiform Seizures due to Sudden Anæmia of the Brain.—Dr. Campbell Pope: Case of Epileptiform Seizure due to Irregular Cardiac Action.—Dr. G. N. Pitt: On Cardiac Dilatation at Puberty.

SOCIETY OF ARTS.—8 P.M. Mr. James Gibbs: The History of Archæology in India.

ROYAL INSTITUTION OF GREAT BRITAIN.—9 P.M. Mr. Howard Grubb: Telescope Objectives and Mirrors, their Preparation and Testing.

Saturday, April 3.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.

ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Mr. Howard Grubb: The Astronomical Telescope.

SOCIETY OF ARTS.—3 P.M. Prof. George Forbes: Electricity.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, March 25th, 1886.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Mar. 19	30·62	E.	46	45	...	61	36	·01	Overcast
,, 20	30·00	S.W.	51	49	...	58	45	·15	Cloudy
,, 21	30·04	S.W.	54	52	...	59	49	·22	Cloudy
,, 22	30·11	W.	49	48	...	56	44	...	Overcast
,, 23	30·16	S.	55	52	...	62	49	·06	Overcast
,, 24	30·05	S.W.	47	46	...	63	45	...	Foggy
,, 25	29·97	S.W.	53	51	...	59	46	...	Cloudy

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

THE POISONS ACT.

THE remarks in our last issue were exemplified last week in Wigan. A shoemaker poisoned himself with bisulphide of carbon, a drug which he was enabled to readily obtain owing to its not being scheduled in the present Poisons Act. Bisulphide of carbon is a substance which is used in the course of trade by shoemakers for making cement, and it was difficult to ascertain in this case the quantity of poison taken, no account of the sale having been kept by the chemist.

M.R.C.S.Eng. & L.S.A.—By the 35th Section of the Medical Act every registered medical practitioner has exemption, if he so desire, from serving all corporate, parochial, and township offices.

DISINFECTION AFTER EPIDEMICS.

To the Editor of THE LANCET.

SIR,—I shall feel greatly obliged to any medical officers of health who will kindly inform me if it is their practice to employ disinfection in houses after all the seven principal diseases of the epidemic class (as contained in the Registrar-General's returns), or what exception they make, if any. I have always hitherto required the employment of disinfection after all these diseases, in accordance with the 22nd Section of the Sanitary Act, 1866; but lately I have met with some opposition to such procedure, as being wholly unnecessary as regards whooping-cough and measles. Your opinion also, Sir, on this matter would be of the greatest value to Your obedient servant,

March 22nd, 1886. A MEDICAL OFFICER OF HEALTH.

*** The usual practice is not to enforce disinfection after measles and whooping-cough.—ED. L.

M.R.C.S.—The War Office has published a manual, to be obtained of Messrs. Clowes and Son, Charing-cross, which contains the information our correspondent probably requires.

Dr. Pitt is thanked.

PUNIS ACCIDENTS.

To the Editor of THE LANCET.

SIR,—The following cases may be deemed of sufficient interest to warrant insertion in your columns.

A short time ago, finding the cord around the neck of a child whose head had just passed the vulva, I proceeded in the usual way to relieve it; just as I had passed it half over the scalp, a sharp pain came on, which snapped it off short at the navel, making the application of the ligature exceedingly difficult. No ill effects followed.

In a case of forceps at the brim, after delivering the head and taking off the forceps under the clothes, the cord was found to be around the neck. After the birth of the body, the cord was found to be half severed and bleeding profusely. I presume a coil of the cord had been caught by the forceps. I am, Sir, yours faithfully,

March, 1886. M.

THE CULMINATION OF QUACKERY.

THIS interesting phenomenon has been reached, according to *El Genio Medico Quirurgico*, at an establishment which has been opened in Barcelona, called the "Medico-cellular Institute," where "every disease without exception" is stated to be treated by "a remedy specific to it, which destroys it and cures it."

Student.—We have no information on the subject beyond what has appeared in our columns.

"NOTES ON THE DIGESTIVE FERMENTS."

To the Editor of THE LANCET.

SIR,—In your issue of Feb. 27th you publish, as the first of a series of "Notes on the Digestive Ferments," a paper by Dr. Murrell on "Pepsin as a Digestive Agent." This paper contains statements which cannot be allowed to pass unnoticed and unchallenged.

After comparing the test for pepsin adopted in the British Pharmacopœia of 1885 with that official in 1867, Dr. Murrell sums up the difference between them is follows:—"In the new Pharmacopœia the time is decreased to one-eighth, while the temperature is raised 32°. This elevation in temperature represents an increase of 16 per cent. in digestive power, so that we lose 87·5 per cent. as regards time and gain 16 per cent. on the temperature, the net result being that our standard is raised 71·5 per cent., for which too much gratitude cannot be shown." Dr. Murrell, then, apparently considers that the solution of the albumen by the pepsin takes place uniformly—that is, that the same amount of albumen is dissolved during equal fractions of the time of duration of the experiment, hence if the time is reduced from four hours to half an hour, or by seven-eighths, the activity of the pepsin must be greater by seven-eighths (87·5 per cent.) to accomplish the same amount of work. The fallacy in this reasoning is equalled only by the inaccuracy of the fundamental proposition upon which it is based. It is a well-known fact that the solution of the albumen does not take place uniformly; indeed, a moment's consideration must have convinced Dr. Murrell to this effect. But, granted for argument's sake that it did, even then to accomplish the same amount of work in one-eighth of the time the activity of the pepsin must be eight times as great, instead of greater by 87·5 per cent. That the elevation of the temperature from 98° to 130° F. represents an increase of 16 per cent. in the activity of the pepsin is to me a new and incomprehensible statement. Authorities on pepsin-testing agree in stating that pepsin is about four times more active at the higher than it is at the lower temperature. But apart from these considerations, the difference in the state of division of the albumen required by the two Pharmacopœias precludes the possibility of any other method of drawing a comparison between the two tests than by actual experiment.

Dr. Murrell decides upon a mode of procedure (that of weighing the residual albumen) which, though it has its advocates, has been generally abandoned, and which leads him into serious manipulative errors. To cut the white of an egg into thin slices instead of pressing it through wire gauze is a decidedly retrograde step, and the manner in which the undissolved albumen is dried and weighed would send a shudder through the frame of an analytical chemist. "Out of thirteen specimens examined," says Dr. Murrell, "only four would have come up to the standard of the new British Pharmacopœia." From any data that may have been ascertained by the test detailed in his paper, Dr. Murrell is not justified in drawing the slightest inference as to the activity of a pepsin when examined by the official method. Whether a sample of pepsin does or does not come up to the standard of the new British Pharmacopœia can be ascertained solely by actual experiment, in which the conditions enjoined by that Pharmacopœia are rigidly adhered to; should it prove deficient, then, and then only, can its condemnation be accepted by pharmacists.

To take for his experiments ten grains of liquid preparations, wines, essences, &c., of which the minimum dose is usually a teaspoonful, is manifestly unfair to the respective manufacturers.

Several other points of minor importance might be alluded to, but for my object the foregoing will suffice. If Dr. Murrell requires a very active pepsin, there is no reason why he should not have it. There is no difficulty in obtaining pepsin of far greater activity than is required by the British Pharmacopœia. I am, Sir, yours truly,

New-street, N.W., March 15th, 1886. HENRY G. GREENISH.

"THE USE OF COCAINE IN OPERATIONS FOR PILES."

To the Editor of THE LANCET.

SIR,—I notice in your issue of the 13th inst. that Dr. Owen Pritchard extols the use of cocaine in operations for piles. Dr. Pritchard describes an operation he has lately performed on one pile. After the application of cocaine he appears to have first crushed the pile, cut it off, and then cauterised it. Dr. Pritchard does not say whether he stretched the sphincter ani muscle. I presume not; for if he had, it probably would not then have been a "painless" operation. I write this to put surgeons on their guard against partial operations on the rectum, either for the cure of prolapsus, fistula, or any other disease, as the operation under these circumstances has to be done over again. I have lately seen several cases of rectal ulcer at the Western Hospital for Fistula, Piles, and other Diseases of the Rectum which had been treated previously. Unfortunately in each case a horseshoe fistula had been overlooked.

I congratulate Dr. Owen Pritchard on the success of his operation; but I still think that cocaine requires to be very cautiously used in rectal surgery. I am, Sir, yours faithfully,

Bennett-street, March 19th, 1886. SAMUEL BENTON.

THE BEST ANTISEPTIC.

ACCORDING to a leader in the *Medical Bulletin*, the best—indeed, the ideal—antiseptic has now been discovered, and is—common salt.

Dr. Hermann Weber.—A short notice would be acceptable.

Dr. Sturges' paper is marked for early insertion.

PROSECUTION UNDER THE INFECTIOUS DISEASES ACT IN SUNDERLAND.

To the Editor of THE LANCET.

SIR,—The following case may be of interest to the profession, as it was made a case of prosecution under the Infectious Diseases Act of the Borough of Sunderland, 1885, where I was last week mulcted, between fine and costs, in a sum of about £4. I shall now lay a faithful account of the case before the profession, leaving them to judge of the justice of it.

On Jan. 8th a message was left for me to call to see a Mrs. L——. On the following day I saw Mrs. L——, and found her in bed. From answers to my questions I gathered that she had been indisposed for more than a month, but able to be out of bed during the greater part of the day. Upon examination, I found a sort of papular eruption over the back and chest, which had, she stated, been present some time. The papules were in general less than the size of a threepenny-piece, slightly raised in the middle, and thinning towards the edges, some of them considerably larger than others, even as large as a halfpenny, and of a brownish colour. The temperature in the axilla was 102°; the tongue was foul and coated. The patient complained of headache, but the mind seemed clear (I may here state that she is of a nervous disposition, and not a strong person at best). The pulse was 90 and weak. I saw her again on the 12th (my assistant saw her on the 11th). The tongue was clean and rather red, as well as the sides of the mouth; temperature, 101°. The patient expressed herself as feeling a little better. My assistant saw her on the 14th, and I again saw her on the 15th. The temperature was 103°; the tongue dry, but clean. She complained of being worse, the head being slightly affected. I suspected fever or blood-poisoning; and as the patient was in a house where there were offices, I resolved to draw the attention of the medical officer of health to the house, although I was by no means satisfied that it was a real case of fever. As the house was close to the health office and a considerable distance from my house, I made out the certificate of notification that night (Jan. 15th), and as the case was very obscure, I took it with me next morning, with the intention of delivering it myself at the health office, and giving an explanation of the case. But while visiting the patient, the husband being at home, and as it was a little out of my way, I gave him the certificate of notification, requesting him to take it to the health office at once, which I believe he did. This method I deemed better and quicker than sending by post, as any explanation that might be required could at once be given, and the necessary disinfectants supplied. The temperature on the 16th was 103°. On the 17th the patient seemed rather better, and the tongue was moist; temperature, 102°.—18th: Temperature, 102°. Tongue moist. The patient had been out of bed, and as she appeared to be improving I did not see her the following day.—20th: Temperature, 101°. She seemed improved, but weak, and complained of headache. On the 24th she was still improving; temperature, 100°. I saw her now and again up till the beginning of February, when I ceased visiting her, as my list during that time was rather heavy, and she seemed so far improved, although by no means strong. It appears that I have reported more cases of infectious disease than any other practitioner in the borough of Sunderland. Your readers may judge of my surprise when I was summoned and mulcted in the sum mentioned, besides the disgrace of having to sit in the police-court from 12 till 2 o'clock. In this case I did my best to bring it under notice, as it was in a house where others were, although I am not yet satisfied as to its infectious nature. In the same room as the patient were sleeping a daughter, eight years of age, and the husband. Neither of them has been affected. The notification was typhoid fever.

I am, Sir, yours obediently,

Sunderland, March, 1886. JOHN RANKINE, M.R.C.P., &c.

A CASE FOR GENERAL SYMPATHY.

To the Editor of THE LANCET.

SIR,—It may be within the remembrance of your readers that in 1883-84 I brought under their notice the distressing case of the wife and two small children of Dr. Cedric H. Harford, B.A., a member of the Medical Department in British Guiana, and that some £500 was collected and invested for their benefit. Dr. Harford's residence in a very unhealthy district (La Retraite) brought on a serious illness, which produced such an effect on his nervous system that he lost his reason and has since died. The interest on the sum raised only produces £35 a year, and Mrs. Harford is striving to maintain herself and her children by giving lessons in singing, for which she is exceptionally well qualified. No doubt people who want their children to sing well would be glad to avail themselves of an opportunity of having them taught from the commencement by one of Signor Randegger's pupils, which Mrs. Harford is. Her terms are 5s. a lesson, and all further particulars may be obtained by applying direct to Mrs. Harford, 43, Mimosa-street, Fulham-road, S.W. I desire to thank you once more on Mrs. Harford's behalf and my own for the great assistance you have so kindly rendered in this matter, and I hope that those who have children of a suitable age will give Mrs. Harford a trial in their own interests as well as from feeling of sympathy.

I am, Sir, yours truly,

HENRY C. BURDETT.

The Lodge, Porchester-square, W., March 23rd, 1886.

SECTARIANISM IN HOSPITALS.

THE REV. ARTHUR BRINCKMAN writes: "The Hospitals Association have by no means got to the bottom of this matter yet. Let the Association move the authorities of the various hospitals to issue a strict order that nurses may worship wherever they choose on Sundays. I have known matrons dismiss a nurse for declining to leave off attending the services at All Saints', Margaret-street, and giving leave to Roman Catholic nurses to go out to an early service, refusing the Church of England nurses asking for a similar permission."

Mr. M. H. Miller.—A seven-months' child is much less likely to live than an eight-months' child. There is a fair chance of rearing a child of thirty-two weeks, and every week added to the thirty-two weeks greatly increases the chance.

"COLOUR-BLINDNESS AMONG MEDICAL MEN."

To the Editor of THE LANCET.

SIR,—That there is great diversity, of kind and of degree, in the impressions experienced by different persons in the exercise of the organs of sight, touch, hearing, and taste, is in the knowledge of most medical men. Some of these impressions deviate so largely from a recognised standard as to be serious defects, of which colour blindness and the inability to distinguish acute from grave sounds (as the sharpness or flatness of a musical note compared with a known pitch), to determine the difference between a smooth and a villous surface (as that of satin from that of velvet), and to differentiate the taste of various substances (as of beef and mutton), are some of the most familiar instances. Is the sense of smell exceptionally free from like defects? I think not. In his evidence relating to the case of alleged poisoning by chloroform at Pimlico, as reported in the papers of yesterday, Dr. Stevenson likens the smell of chloral hydrate to that of lemon. Having always felt that the odour of the former was accurately represented by that of the water-melon, and having vainly endeavoured to trace the faintest resemblance in it to that of lemon, I have asked myself whether I am suffering from a defect of the olfactory sense, which, in the absence of a name for it, I venture to call anosphresis (ἀνα-οσφρησις). Perhaps some of your readers, including the eminent analyst referred to, will kindly put me right in this matter, the subject being, as it seems to me, one of great importance in medico-legal investigations.—I remain, Sir, your obedient servant,

G. E. NICHOLAS, M.D.,

March 23rd, 1886. Medical Officer of Health for Wandsworth.

PAINFUL DEFECATION.

PAINFUL defecation due to various causes, including fissure and piles, may, according to a New Orleans physician, Dr. Logan, be relieved at once by applying a few drops of oleate of cocaine to the anus.

Dr. Purcell.—Very soon.

PRACTICE AT THE CAPE.

To the Editor of THE LANCET.

SIR,—In reply to the inquiries of "A Constant Reader" in your last issue (p. 575), I beg to say that after many years' residence in the Cape Colony as a medical man I cannot recommend it at the present time as a field for practice. The Colony is in very low water and crowded with doctors. I know of several well-qualified young men who have been travelling from town to town and find it impossible to earn a livelihood. It was not so formerly. The cause of the change is not far to seek. Many of the better-to-do colonists have of late brought up their sons to medicine, and their example has been followed until the profession has been altogether overdone. These colonists have a great advantage over a stranger: they speak the Dutch language (which is necessary to success), understand local customs, and have family influence. Drugs are easily obtained in Cape Town, price from 100 to 130 per cent. over English prices; bottles 200 per cent. or more, besides inland carriage. A few hundred pounds would be necessary to start with, as money flies while travelling in search of an opening, and while learning the language. I would add, it would be wise to keep a reserve with which to beat a retreat should it be found necessary.

I am, Sir, yours truly,

March 23rd, 1886. CAPE COLONIST.

To the Editor of THE LANCET.

SIR,—*If* "Constant Reader" will send his address to J. B., 412, Battersea-park-road, S.W., he may get full details of Cape practice and the information he needs.—I am, Sir, yours obediently,

March 22nd, 1886. A COLONIST AND PRACTITIONER.

DERIVATION OF THE WORD "GLAUCOMA."

To the Editor of THE LANCET.

SIR,—I have always seen the word γλαυκος, sea-green, given as the derivation of "glaucoma," and Mr. St. Clair Buxton, who is an ophthalmic surgeon and ought to be an authority, repeats that derivation in your issue of to-day. It has, however, always appeared to me that a more probable source is the word γλαυξ, γλαυκος, an owl; and I should like to submit this origin to the profession. Considering the number of horrid hybrid words which are yearly admitted to the English language, we doctors ought to struggle to keep our terminology accurate.

I am, Sir, yours truly,

March 20th, 1886. M.D. Durh.

NITRO-GLYCERINE TABLETS.

To the Editor of THE LANCET.

SIR,—By way of correction of an annotation in THE LANCET of to-day (p. 560), headed the "Poisons Act," as the inventor and advertiser of the above, I beg to say: (1) They are not "commonly advertised as a popular remedy." They are only advertised in THE LANCET, the medical and pharmaceutical journals, and in a circular issued solely to the medical profession and the drug trade (one enclosed). (2) As to their being "objectionable and dangerous chocolate drops," their portability and palatability, and the relief they have afforded to late members of the Medical Council and patients of all grades, dispose of the first. With regard to the second, in my large experience of them I have not met with a single case of danger from their use, nor am I aware of any case recorded. I believe they have afforded more relief to painful human sufferin than any medicinal preparation introduced during the last twenty years. Should they be placed in the poisons schedule I should be compelled to label them "Legally Poison, but not Poisonous." (3) The 1 per cent. alcoholic solution of nitro-glycerine evaporates and leaves a residue uncertain in strength. The tablets are always stable, safe, and in divided doses. They contain $\frac{1}{100}$ gr. in each, but can be made to contain any dose. They are quick in action, not like the pills which I first prepared; these require time to dissolve and are slow in giving relief to acute pain. I prepared the tablets in the first instance at the request of a medical writer on nitro-glycerine who had found this exceedingly useful in angina pectoris. He wished to have it in a portable form for patients who were attacked when away from home. The Home Office refused me leave to buy nitro-glycerine in any form. I always make the mass for my tablets personally with my life in my hands. They represent an achievement in pharmacy second to none during the last century. The most dangerous and unstable explosive of modern times, by my process I prepare for medical use in a perfectly safe, stable, palatable, and portable condition in divided doses, and supply them at the rate of seven doses for a penny to hospitals buying a pound for the use of their patients. As to the "egregious blunder" of inserting them in the British Pharmacopœia, I pass this over. Pharmacists have no voice in compiling our national pharmacopœia; but I may say if a 1 per cent. alcoholic solution be preferred, there is nothing to prevent physicians prescribing as much as they please of it, as every respectable pharmacist has it in stock; but it is uncertain in strength. A 1 per cent. oily solution, as I have suggested, is much more uniform; but neither is portable. Nearly one-half the tablets I sell are exported, principally to Greater Britain, where no shipment of alcoholic solution of nitro-glycerine can be made as ordinary cargo, and where suffering patients would have to continue their sufferings unless the tablets could be obtained. The writer of the annotation referred to overlooks the fact that chloroform is in Part II. of the Poisons Schedule of the Pharmacy Act, 1868.—Yours truly,

March 20th, 1886. W. MARTINDALE.

*** Mr. Martindale forgets that he is not the only maker and advertiser of nitro-glycerine tablets. As a matter of fact, they are commonly sold to patients without a prescription or order of any kind from a doctor. We are assured on good authority that the chocolate lozenges are not so prompt in their action as the 1 per cent. alcoholic solution, and that in several cases their injudicious use has been attended with untoward results.—ED. L.

E.C.L.C.—The question is one we do not see our way usefully to discuss at the present time.

A CORRECTION.

To the Editor of THE LANCET.

SIR,—In my article on the "Medical History of the Suakim Expeditionary Force," inserted in your issue of the 20th ult., from "the treatment adopted" to "two to three ounces with iced water" (lines thirty-four to fifty-four of the second column), should have been inserted after "from 9 to 12 P.M." (line twenty).—Yours obediently,

J. ROCHEID FORREST,
Suakim, March 10th, 1886. Surgeon, Army Medical Staff.

THE DISPOSAL OF THE SEWAGE OF LONDON.

IN an article which appeared in our columns on the 20th inst., upon the scheme of the Metropolitan Board of Works for the disposal of the sewage of London, we omitted to state that a full text of the report as submitted to the Board appeared in the *Metropolitan* of the 13th inst., as well as in *The Times* of that date, to whose report we referred.

C. H. W.—The Royal Medical Benevolent College, Epsom.

OWING to pressure on our space we are compelled to hold over many articles and communications, already in type.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. E. A. Sansom, London; Mr. C. S. Jeaffreson, Newcastle-on-Tyne; Dr. Jas. Wilson, Liverpool; Dr. Pavy, London; Mr. Ransford, London; Dr. R. Lee, London; Mr. G. Cowell, London; Dr. Kirby, Beckenham; Mr. J. Cooper, Middlesborough; Mr. W. Thomas, Birmingham; Dr. Lycett; Mr. Abbott, Tunbridge Wells; Dr. Kirk, Partick; Mr. C. F. Smith, Carlisle; Rev. A. Brinckman, London; Dr. Barnes, London; Mr. J. Johnson, Clare; Dr. Latham, Cambridge; Major Allsop; Mr. H. C. Gillies, Brockley; Mr. J. Odling, London; Mr. W. MacGregor, Bedford; Dr. W. Curran, London; Mr. Jennings, London; Mr. Jessett, London; Surg.-Major Evatt; Dr. Blenkinsop, London; Dr. Fenwick, London; Mr. J. McCulloch, London; Mr. Auld, Wick; Dr. Hermann Weber, London; Dr. Abrath, Sunderland; Mr. Reginald Harrison, Liverpool; Mr. S. J. Samuel, London; Mr. Abbe; Mr. Woodland, London; Mr. J. R. Forrest, Suakim; Messrs. Oliver and Boyd, Edinburgh; Dr. Roche, Kingstown; Dr. McCrarth, Smyrna; Mr. Radford, Newhaven; Mr. Raven, Broadstairs; Mr. Giles, London; Mr. Mivart, London; Mr. Crassweller, Highbury; Messrs. Knight and Co., Rotherham; Messrs. Beal and Sons, Brighton; Dr. Reed, Samand, West Indies; Mrs. Piggott, Preston; Dr. Anderson, Glasgow; Mr. Hughes, Brompton; Messrs. Roberts and Co., London; Messrs. Squire and Sons, London; Dr. Beveridge, Leith; Mr. Cockerill; Mr. Tanner, Newport; Mr. Somerville, Edinburgh; Dr. Nisbet; Messrs. Clark and Co., Glasgow; Dr. Chersall, Hawley; Mrs. Watson, Regent's-park; Mr. Hastings, London; Rev. W. Bell; Dr. MacGregor, Aberdeen; Mr. Polenz, London; Mrs. Mothers, Clevedon; Mr. Holtby, York; Mr. Kelsey; Mr. J. Stewart, Clifton; Dr. D. W. Williams, Truro; Mr. J. H. Potter, Sheffield; Dr. Menzies, Paris; Mr. E. H. Saunders, Devonport; Dr. Nicholas, Wandsworth; Mr. H. Addison, Holloway; Mr. O'Hanlan, Spennymoor; Mr. Cooper, Hull; Mr. E. C. Wickham, Wokingham; Mr. Ensor, Port Elizabeth; Mr. Parks, London; Mr. Holmes, London; Mr. Blandford, Stockton-on-Tees; Surg.-Major Pringle; M.D., Durh.; E. C. L. C.; Student; M. J.; R., Finsbury; A. E. J., Haden Bridge; M.D. Upper Edmonton.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Shaw, Crouch Hill; Miss Carson, Burton-on-Trent; Mr. Moullin; Mr. Ellis, Bishop Auckland; Dr. Heelas, Bonchurch; Mr. Salter, Gisborne, Victoria; Mr. Watkins, Layton; Mr. Young, Hawkhurst; Mr. Thomas Cook, London; Mrs. Stevenson, Brighton; Messrs. Henderson and Co., London; Mr. Page, Sheffield; Mr. Watters; Mr. Sanders, South Molton; Mr. Hill, Beeralston; Mrs. Rendall, Norwich; Mr. Cocking, Gainsboro'; Dr. Harvey, London; Miss South, Hastings; Dr. Eberle, Thirsk; Mr. Robertson, Bayswater; Mr. Merryweather; Mr. Adie, Shoreditch; Mr. Lyle, Shacklewell; Dr. Taylor, Cardiff; Mr. Stone, Lasswade; Mr. Somerville, Edinburgh; Mr. Armistead, Manchester; Mrs. Griffiths, Southport; Matron, Bridgwater Infirmary; Medicus, Brighton; Alpha; Surgeon, Hull; L., Bayswater; Senior; Medicus, Southport; A. B.; F. N. W., Grantham; Remo; L.R.C.P., Southampton; M.R.C.S., York; Delta, Darlington.

Liverpool Courier, Hertfordshire Mercury, Windsor and Eton Express, City Press, Newcastle Weekly Chronicle, Sanitary Engineering, Southend-on-Sea Observer, Brisbane Telegraph, &c., have been received.

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